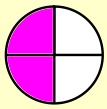
# Cuaderno de Ejercicios

# Fracciones

## Aprender las Fracciones

- Sumas de Fracciones
- Resta de Fracciones
- Multiplicación de Fracciones
- Equivalentes de Fracciones

1 )  $\frac{4}{8}$ =  $\frac{2}{4}$

2 )  $\frac{10}{12}$ =  $\frac{5}{6}$

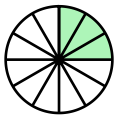
$\frac{4}{9}$

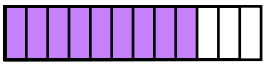
TOMO I

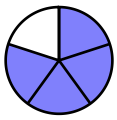
Manualidades Educativas

# 1. Qué es una fracción

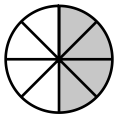
En los ejercicios 1) al 10) debes indicar la fracción que corresponde a las rebanadas coloreadas en cada figura. En los ejercicios 11) al 20) debes colorear la fracción.

1 )  _____

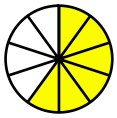
2 )  _____

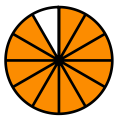
3 )  _____

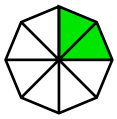
4 )  _____

5 )  _____

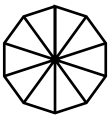
6 )  _____

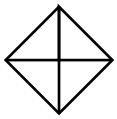
7 )  _____

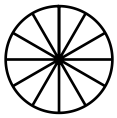
8 )  _____

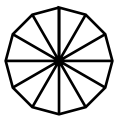
9 )  _____

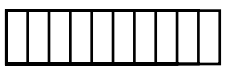
10 )  _____

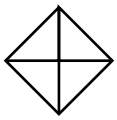
11 )  $\frac{4}{10}$

12 )  $\frac{1}{4}$

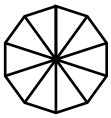
13 )  $\frac{6}{12}$

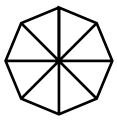
14 )  $\frac{7}{12}$

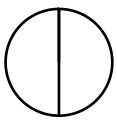
15 )  $\frac{1}{10}$

16 )  $\frac{3}{4}$

17 )  $\frac{2}{4}$

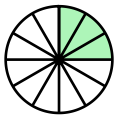
18 )  $\frac{3}{10}$

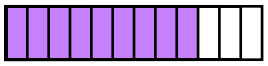
19 )  $\frac{5}{8}$

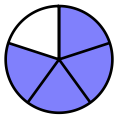
20 )  $\frac{1}{2}$

# 1. Qué es una fracción (respuestas)

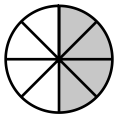
En los ejercicios 1) al 10) debes indicar la fracción que corresponde a las rebanadas coloreadas en cada figura. En los ejercicios 11) al 20) debes colorear la fracción.

1 )  $\frac{3}{12}$

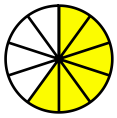
2 )  $\frac{9}{12}$

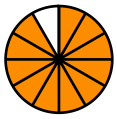
3 )  $\frac{4}{5}$

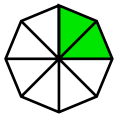
4 )  $\frac{5}{12}$

5 )  $\frac{4}{8}$

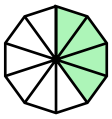
6 )  $\frac{2}{10}$

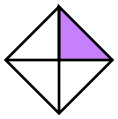
7 )  $\frac{6}{10}$

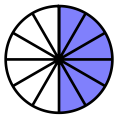
8 )  $\frac{11}{12}$

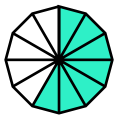
9 )  $\frac{2}{8}$

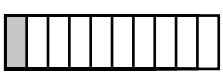
10 )  $\frac{2}{3}$

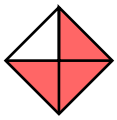
11 )  $\frac{4}{10}$

12 )  $\frac{1}{4}$

13 )  $\frac{6}{12}$

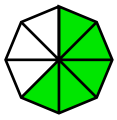
14 )  $\frac{7}{12}$

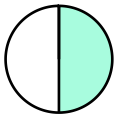
15 )  $\frac{1}{10}$

16 )  $\frac{3}{4}$

17 )  $\frac{2}{4}$

18 )  $\frac{3}{10}$

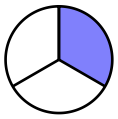
19 )  $\frac{5}{8}$

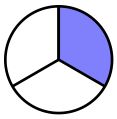
20 )  $\frac{1}{2}$

# 2. Suma de fracciones con mismo denominador

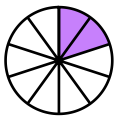
En los siguientes ejercicios debes realizar la suma de fracciones. Colorea el total de rebanadas sumadas y escribe la fracción con número.

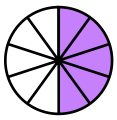
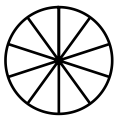
1 )



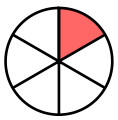
$\frac{1}{3}$ +  $\frac{1}{3}$ =  _____

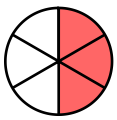
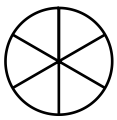
2 )



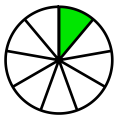
$\frac{2}{10}$ +  $\frac{5}{10}$ =  _____

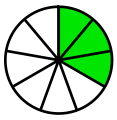
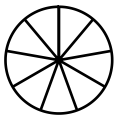
3 )



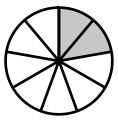
$\frac{1}{6}$ +  $\frac{3}{6}$ =  _____

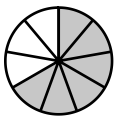
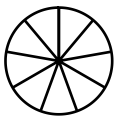
4 )



$\frac{1}{9}$ +  $\frac{3}{9}$ =  _____

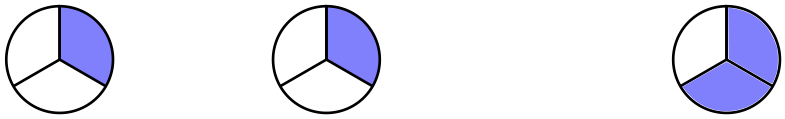
5 )



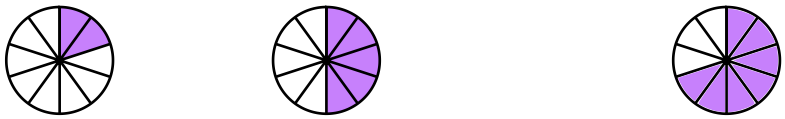
$\frac{2}{9}$ +  $\frac{6}{9}$ =  _____

# 2. Suma de fracciones con mismo denominador (respuestas)

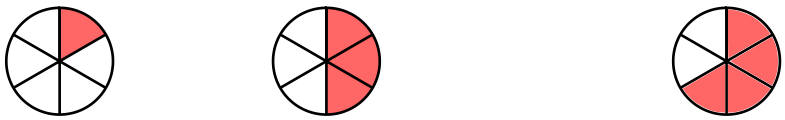
En los siguientes ejercicios debes realizar la suma de fracciones. Colorea el total de rebanadas sumadas y escribe la fracción con número.

1 ) 

$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

2 ) 

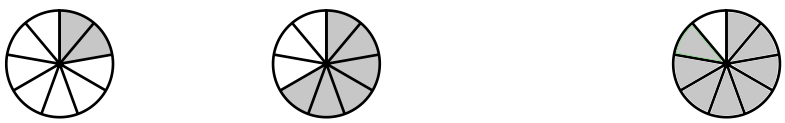
$\frac{2}{10} + \frac{5}{10} = \frac{7}{10}$

3 ) 

$\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$

4 ) 

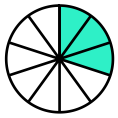
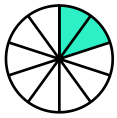
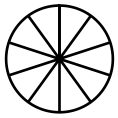
$\frac{1}{9} + \frac{3}{9} = \frac{4}{9}$

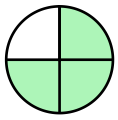
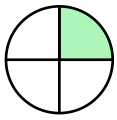
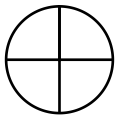
5 ) 

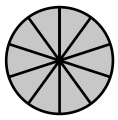
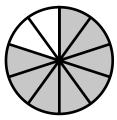
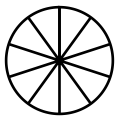
$\frac{2}{9} + \frac{6}{9} = \frac{8}{9}$

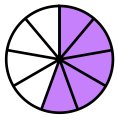
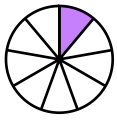
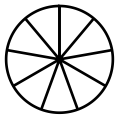
# 3. Resta de fracciones con mismo denominador

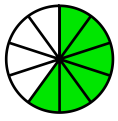
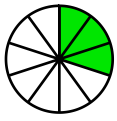
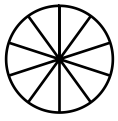
En los siguientes ejercicios debes realizar la resta de fracciones. Colorea el total de rebanadas que sobran y escribe con número la fracción que representa.

1 )  $\frac{3}{10}$ -  $\frac{2}{10}$ =  _____

2 )  $\frac{3}{4}$ -  $\frac{1}{4}$ =  _____

3 )  $\frac{10}{10}$ -  $\frac{8}{10}$ =  _____

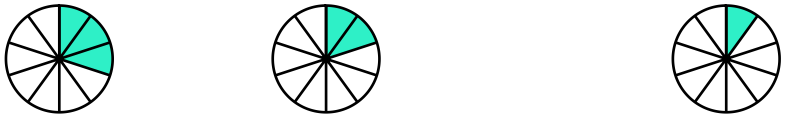
4 )  $\frac{5}{9}$ -  $\frac{1}{9}$ =  _____

5 )  $\frac{6}{10}$ -  $\frac{3}{10}$ =  _____

# 3. Resta de fracciones con mismo denominador (respuestas)

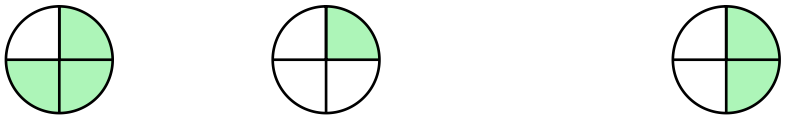
En los siguientes ejercicios debes realizar la resta de fracciones. Colorea el total de rebanadas que sobran y escribe con número la fracción que representa.

1 )



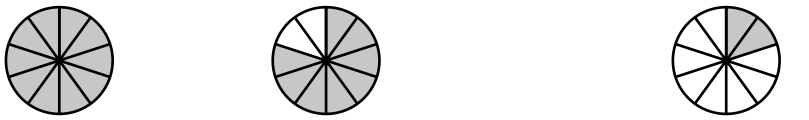
$\frac{3}{10} - \frac{2}{10} = \frac{1}{10}$

2 )



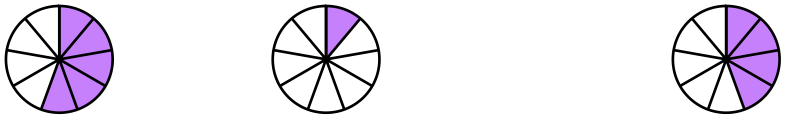
$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$

3 )



$\frac{10}{10} - \frac{8}{10} = \frac{2}{10}$

4 )



$\frac{5}{9} - \frac{1}{9} = \frac{4}{9}$

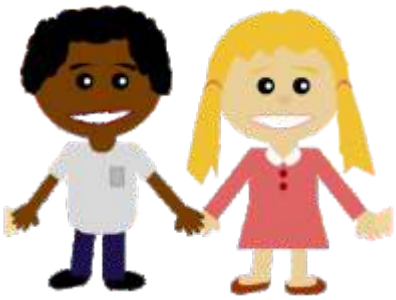
5 )

$\frac{6}{10} - \frac{3}{10} = \frac{3}{10}$

# 4. Pizzas y fracciones

En este ejercicio tienes que partir las pizzas en rebanadas iguales y repartirlas entre los amigos que se juntaron para comer la pizza. Tienes que escribir la fracción de pizza que le toca a cada persona en cada grupo de amigos. Dibuja los cortes de las rebanadas.

1.



Fracción de pizza por amigo: ____

2.

Fracción de pizza por amigo: ____

3.

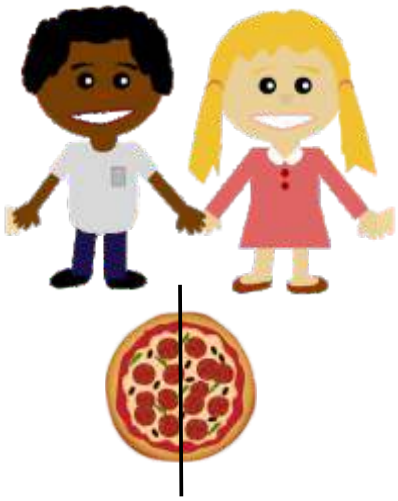
Fracción de pizza por amigo: ____

4.

Fracción de pizza por amigo: ____

# 4. Pizzas y fracciones (respuestas)

1.

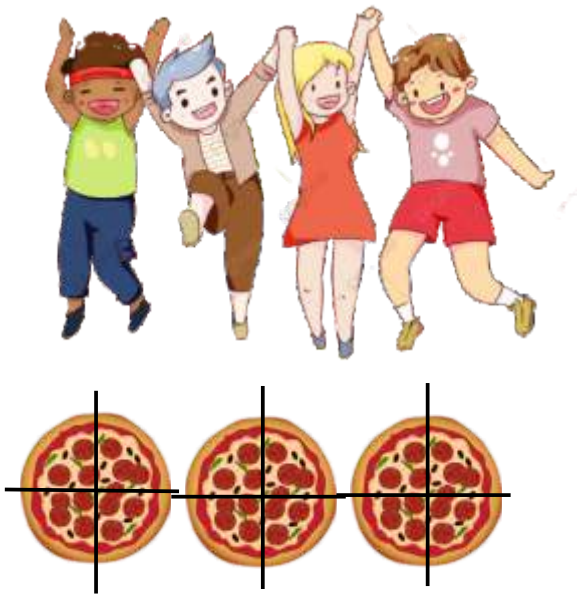


Fracción de pizza por amigo: $\frac{1}{2}$

2.

Fracción de pizza por amigo: $\frac{2}{3}$

3.



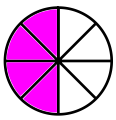
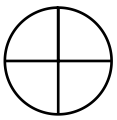
Fracción de pizza por amigo: $\frac{3}{4}$

4.

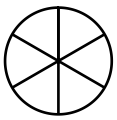
Fracción de pizza por amigo: $\frac{4}{5}$

# 5. Fracciones Equivalentes

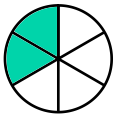
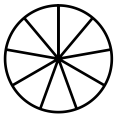
En cada ejercicio, colorea la fracción equivalente, es decir, las rebanadas que ocupen la misma cantidad que las coloreadas. Escribe en número la fracción.

1 )  = 

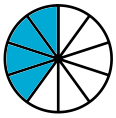
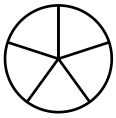
$\frac{4}{8}$ _____

2 )  = 

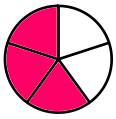
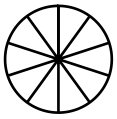
$\frac{10}{12}$ _____

3 )  = 

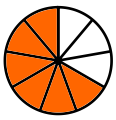
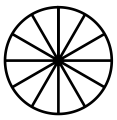
$\frac{2}{6}$ _____

4 )  = 

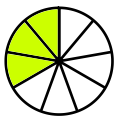
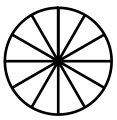
$\frac{4}{10}$ _____

5 )  = 

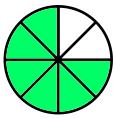
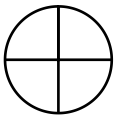
$\frac{3}{5}$ _____

6 )  = 

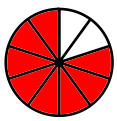
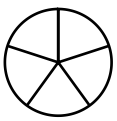
$\frac{6}{9}$ _____

7 )  = 

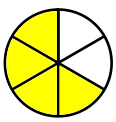
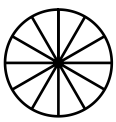
$\frac{3}{9}$ _____

8 )  = 

$\frac{6}{8}$ _____

9 )  = 

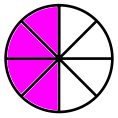
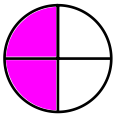
$\frac{8}{10}$ _____

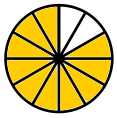
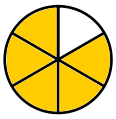
10)  = 

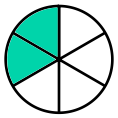
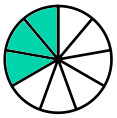
$\frac{4}{6}$ _____

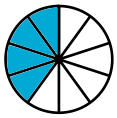
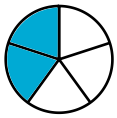
# 5. Fracciones equivalentes (respuestas)

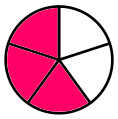
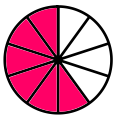
En cada ejercicio, colorea la fracción equivalente, es decir, las rebanadas que ocupen la misma cantidad que las coloreadas. Escribe en número la fracción.

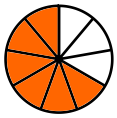
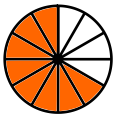
1 )  $\frac{4}{8}$ =  $\frac{2}{4}$

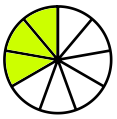
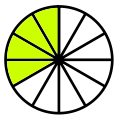
2 )  $\frac{10}{12}$ =  $\frac{5}{6}$

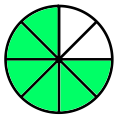
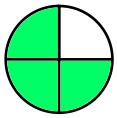
3 )  $\frac{2}{6}$ =  $\frac{3}{9}$

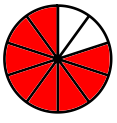
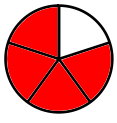
4 )  $\frac{4}{10}$ =  $\frac{2}{5}$

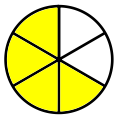
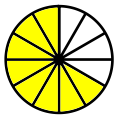
5 )  $\frac{3}{5}$ =  $\frac{6}{10}$

6)  $\frac{6}{9}$ =  $\frac{8}{12}$

7 )  $\frac{3}{9}$ =  $\frac{4}{12}$

8 )  $\frac{6}{8}$ =  $\frac{3}{4}$

9 )  $\frac{8}{10}$ =  $\frac{4}{5}$

10)  $\frac{4}{6}$ =  $\frac{8}{12}$

# 6. Fracciones Equivalentes

En cada ejercicio, colorea la fracción equivalente, es decir, las rebanadas que ocupen la misma cantidad que las coloreadas. Escribe en número la fracción.

1 )

| 1/2 | 1/2 |
|---|---|

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

1/2 = /4

2 )

| 1/2 | 1/2 |
|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

1/2 = /8

3 )

| 1/3 | 1/3 | 1/3 |
|---|---|---|

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

2/3 = /6

4 )

| 1/3 | 1/3 | 1/3 |
|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

1/3 = /12

5 )

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

3/4 = /8

6 )

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

2/4 = /12

7 )

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

3/6 = /8

8 )

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

5/6 = /12

9 )

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

2/8 = /4

10)

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

4/8 = /12

# 6. Fracciones equivalentes (respuestas)

En cada ejercicio, colorea la fracción equivalente, es decir, las rebanadas que ocupen la misma cantidad que las coloreadas. Escribe en número la fracción.

1 )

| 1/2 | 1/2 |
|---|---|

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

1/2 = 2/4

2 )

| 1/2 | 1/2 |
|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

1/2 = 4/8

3 )

| 1/3 | 1/3 | 1/3 |
|---|---|---|

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

2/3 = 4/6

4 )

| 1/3 | 1/3 | 1/3 |
|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

1/3 = 4/12

5 )

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

3/4 = 6/8

6 )

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

2/4 = 6/12

7 )

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

3/6 = 4/8

8 )

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

5/6 = 10/12

9 )

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|

2/8 = 1/4

10)

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |

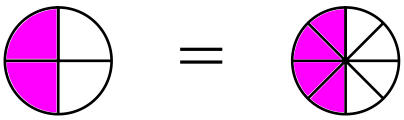
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |

4/8 = 6/12

# 7. Fracciones Equivalentes

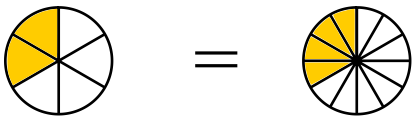
Completa la información faltante en cada ejercicio para determinar la fracción equivalente. Colorea las rebanadas y escribe la fracción.

1 )



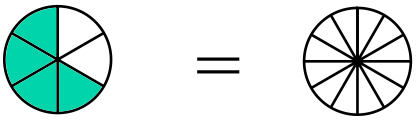
$$\frac{2}{4}=\frac{(2)(2)}{(4)(2)}=\frac{\quad}{\quad}$$

2 )



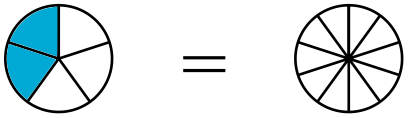
$$\frac{2}{6}=\frac{(2)(\quad)}{(6)(\quad)}=\frac{4}{12}$$

3 )



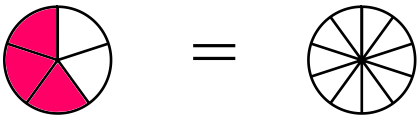
$$\frac{4}{6}=\frac{(4)(\quad)}{(6)(\quad)}=\frac{8}{12}$$

4 )



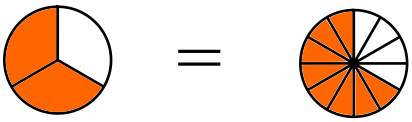
$$\frac{2}{5}=\frac{(2)(2)}{(5)(2)}=\frac{\quad}{\quad}$$

5 )



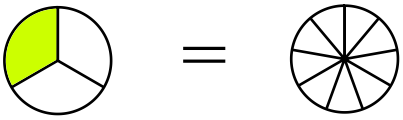
$$\frac{3}{5}=\frac{(3)(\quad)}{(5)(\quad)}=\frac{\quad}{10}$$

6 )



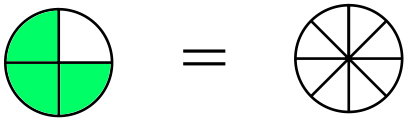
$$\frac{2}{3}=\frac{(2)(\quad)}{(3)(\quad)}=\frac{\quad}{\quad}$$

7 )



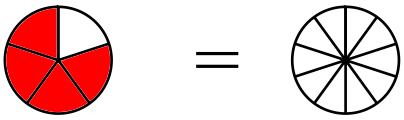
$$\frac{1}{3}=\frac{(1)(\quad)}{(3)(\quad)}=\frac{3}{\quad}$$

8 )



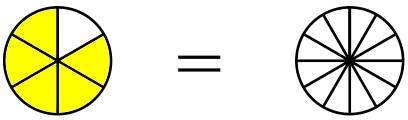
$$\frac{3}{4}=\frac{(3)(\quad)}{(4)(\quad)}=\frac{\quad}{8}$$

9 )



$$\frac{4}{5}=\frac{(4)(\quad)}{(5)(\quad)}=\frac{\quad}{\quad}$$

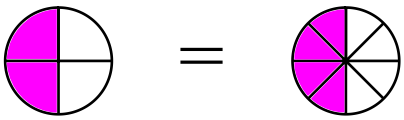
10)



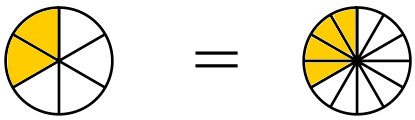
$$\frac{5}{6}=\frac{(5)(\quad)}{(6)(\quad)}=\frac{\quad}{\quad}$$

# 7. Fracciones equivalentes (respuestas)

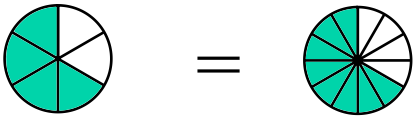
Completa la información faltante en cada ejercicio para determinar la fracción equivalente. Colorea las rebanadas y escribe la fracción.

1 ) 

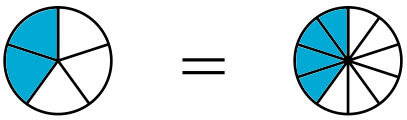
$$\frac{2}{4}=\frac{(2)(2)}{(4)(2)}=\frac{4}{8}$$

2 ) 

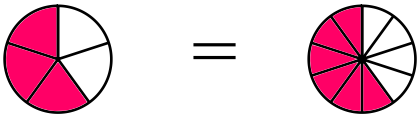
$$\frac{2}{6}=\frac{(2)(2)}{(6)(2)}=\frac{4}{12}$$

3 ) 

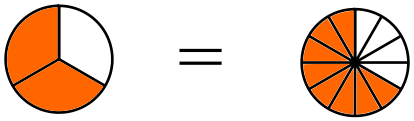
$$\frac{4}{6}=\frac{(4)(2)}{(6)(2)}=\frac{8}{12}$$

4 ) 

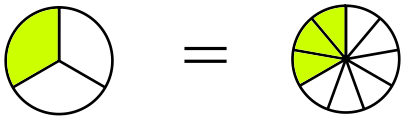
$$\frac{2}{5}=\frac{(2)(2)}{(5)(2)}=\frac{4}{10}$$

5 ) 

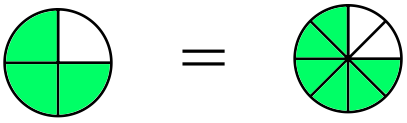
$$\frac{3}{5}=\frac{(3)(2)}{(5)(2)}=\frac{6}{10}$$

6 ) 

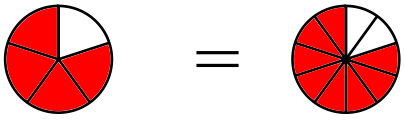
$$\frac{2}{3}=\frac{(2)(4)}{(3)(4)}=\frac{8}{12}$$

7 ) 

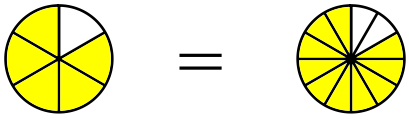
$$\frac{1}{3}=\frac{(1)(3)}{(3)(3)}=\frac{3}{9}$$

8 ) 

$$\frac{3}{4}=\frac{(3)(2)}{(4)(2)}=\frac{6}{8}$$

9 ) 

$$\frac{4}{5}=\frac{(4)(2)}{(5)(2)}=\frac{8}{10}$$

10) 

$$\frac{5}{6}=\frac{(5)(2)}{(6)(2)}=\frac{10}{12}$$

# 8. Reducción de fracciones

En cada ejercicio, debes pegar rebanadas para encontrar una fracción equivalente. Completa la información que haga falta y colorea las fracciones que lo necesiten.

**1 )**

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|
| 1/2 | | 1/2 | |

$\frac{2}{4} = \frac{2/2}{4/2} = \frac{1}{2}$

**2 )**

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/2 | | 1/2 | |

$\frac{4}{8} = \frac{4/4}{8/4} = \frac{\quad}{\quad}$

**3 )**

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|
| 1/3 | | 1/3 | | 1/3 | |

$\frac{2}{6} = \frac{2/2}{6/2} = \frac{\quad}{3}$

**4 )**

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
| 1/3 | | 1/3 | | 1/3 | |

$\frac{8}{12} = \frac{8/4}{12/4} = \frac{2}{\quad}$

**5 )**

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/4 | 1/4 | 1/4 | 1/4 |

$\frac{6}{8} = \frac{6/}{8/} = \frac{3}{4}$

**6 )**

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | 1/4 | 1/4 | 1/4 | | |

$\frac{6}{12} = \frac{6/}{12/3} = \frac{2}{\quad}$

**7 )**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | | | | | | |

$\frac{16}{24} = \frac{16/4}{24/} = \frac{\quad}{6}$

**8 )**

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |

$\frac{10}{12} = \frac{10/}{12/2} = \frac{5}{\quad}$

**9 )**

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/4 | 1/4 | 1/4 | 1/4 |

$\frac{2}{8} = \frac{2/}{8/} = \frac{\quad}{\quad}$

**10)**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | | | | | | |
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | | | | | | |

$\frac{8}{24} = \frac{8/}{24/} = \frac{\quad}{\quad}$

# 8. Reducción de fracciones (respuestas)

En cada ejercicio, debes pegar rebanadas para encontrar una fracción equivalente. Completa la información que haga falta y colorea las fracciones que lo necesiten.

1 )

| 1/4 | 1/4 | 1/4 | 1/4 |
|---|---|---|---|
| 1/2 | | 1/2 | |

$$\frac{2}{4}=\frac{2/2}{4/2}=\frac{1}{2}$$

2 )

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/2 | | 1/2 | |

$$\frac{4}{8}=\frac{4/4}{8/4}=\frac{1}{2}$$

3 )

| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |
|---|---|---|---|---|---|
| 1/3 | | 1/3 | | 1/3 | |

$$\frac{2}{6}=\frac{2/2}{6/2}=\frac{1}{3}$$

4 )

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
| 1/3 | | 1/3 | | 1/3 | |

$$\frac{8}{12}=\frac{8/4}{12/4}=\frac{2}{3}$$

5 )

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/4 | 1/4 | 1/4 | 1/4 |

$$\frac{6}{8}=\frac{6/2}{8/2}=\frac{3}{4}$$

6 )

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | | 1/4 | | 1/4 | | 1/4 | | | | | |

$$\frac{6}{12}=\frac{6/3}{12/3}=\frac{2}{4}$$

7 )

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | | | | | | |

$$\frac{16}{24}=\frac{16/4}{24/4}=\frac{4}{6}$$

8 )

| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
|---|---|---|---|---|---|
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 |
| 1/6 | 1/6 | 1/6 | 1/6 | 1/6 | 1/6 |

$$\frac{10}{12}=\frac{10/2}{12/2}=\frac{5}{6}$$

9 )

| 1/8 | 1/8 | 1/8 | 1/8 |
|---|---|---|---|
| 1/8 | 1/8 | 1/8 | 1/8 |
| 1/4 | 1/4 | 1/4 | 1/4 |

$$\frac{2}{8}=\frac{2/2}{8/2}=\frac{1}{4}$$

10)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | | | | | | |
| 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | 1/12 | | | | | | |

$$\frac{8}{24}=\frac{8/2}{24/2}=\frac{4}{12}$$

# 9. Reducción de fracciones

En cada ejercicio, factoriza el numerador y el denominador. Después, cancela números iguales (arriba y abajo) para reducir la fracción.

1 ) $\frac{63}{70} = \frac{(7)(9)}{(7)(10)} = \frac{\quad}{10}$

2 ) $\frac{4}{16} = \frac{(2)(2)}{(2)(8)} = \frac{(2)(\_)(1)}{(2)(2)(4)} = \frac{1}{4}$

3 ) $\frac{4}{10} = \frac{(\_)(2)}{(2)(5)} = \frac{2}{\quad}$

4 ) $\frac{6}{18} = \frac{(2)(3)}{(2)(9)} = \frac{(\_)(\_)(1)}{(2)(3)(3)} = \frac{1}{\quad}$

5 ) $\frac{42}{48} = \frac{(\_)(7)}{(6)(\_)} = \frac{\quad}{8}$

6 ) $\frac{10}{20} = \frac{(2)(5)}{(2)(10)} = \frac{(\_)(5)(1)}{(2)(\_)(5)} = \frac{\quad}{\quad}$

7 ) $\frac{42}{60} = \frac{(2)(21)}{(2)(30)} = \frac{(2)(3)(7)}{(2)(6)(5)} = \frac{(\_)(3)(7)}{(\_)(2)(\_)(5)} = \frac{\quad}{10}$

8 ) $\frac{6}{15} = \frac{(\_)(\_)}{(\_)(\_)} = \frac{2}{5}$

9 ) $\frac{14}{42} = \frac{(2)(\_)}{(\_)(7)} = \frac{(\_)(7)(1)}{(2)(\_)(7)} = \frac{\quad}{3}$

10 ) $\frac{12}{21} = \frac{(\_)(\_)}{(\_)(\_)} = \frac{(\_)(\_)(\_)}{(\_)(\_)} = \frac{\quad}{\quad}$

# 9. Reducción de fracciones (respuestas)

En cada ejercicio, factoriza el numerador y el denominador. Después, cancela números (arriba y abajo) para reducir la fracción.

1 ) $\frac{63}{70} = \frac{(7)(9)}{(7)(10)} = \frac{9}{10}$

2 ) $\frac{4}{16} = \frac{(2)(2)}{(2)(8)} = \frac{(2)(2)(1)}{(2)(2)(4)} = \frac{1}{4}$

3 ) $\frac{4}{10} = \frac{(2)(2)}{(2)(5)} = \frac{2}{5}$

4 ) $\frac{6}{18} = \frac{(2)(3)}{(2)(9)} = \frac{(2)(3)(1)}{(2)(3)(3)} = \frac{1}{3}$

5 ) $\frac{42}{48} = \frac{(6)(7)}{(6)(8)} = \frac{7}{8}$

6 ) $\frac{10}{20} = \frac{(2)(5)}{(2)(10)} = \frac{(2)(5)(1)}{(2)(5)(2)} = \frac{1}{2}$

7 ) $\frac{42}{60} = \frac{(2)(21)}{(2)(30)} = \frac{(2)(3)(7)}{(2)(6)(5)} = \frac{(2)(3)(7)}{(2)(2)(3)(5)} = \frac{7}{10}$

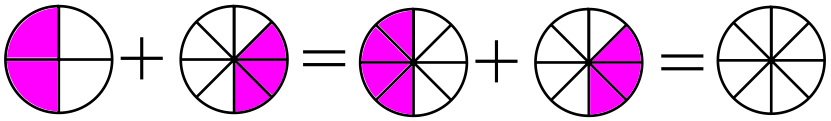
8 ) $\frac{6}{15} = \frac{(3)(2)}{(3)(5)} = \frac{2}{5}$

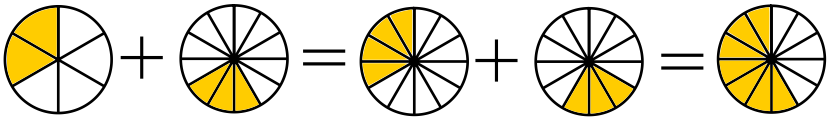
9 ) $\frac{14}{42} = \frac{(2)(7)}{(6)(7)} = \frac{(2)(7)(1)}{(2)(3)(7)} = \frac{1}{3}$

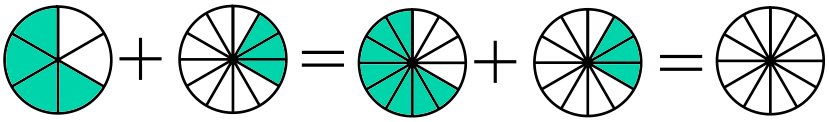
10 ) $\frac{12}{21} = \frac{(2)(6)}{(3)(7)} = \frac{(2)(2)(3)}{(7)(3)} = \frac{4}{7}$

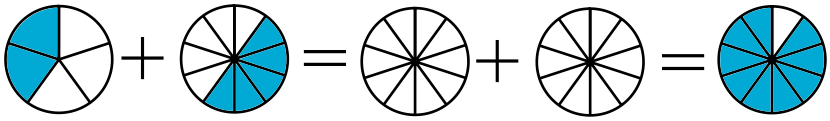
# 10. Suma de fracciones distinto denominador

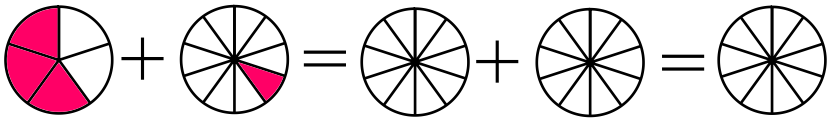
Completa la información faltante en cada ejercicio para determinar la suma de fracciones. Colorea las rebanadas y escribe la fracción.

1 )  $\frac{2}{4}+\frac{3}{8}=\frac{4}{8}+\frac{3}{8}=\_$

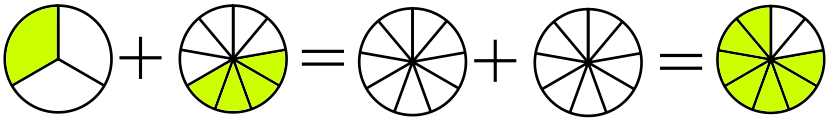
2 )  $\frac{2}{6}+\frac{3}{12}=\frac{\_}{12}+\frac{\_}{12}=\_$

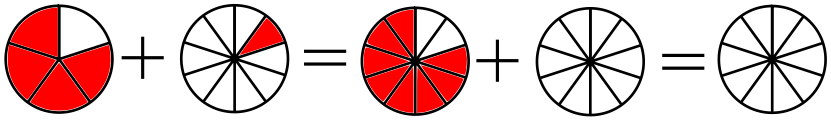
3 )  $\frac{4}{6}+\frac{3}{12}=\frac{8}{\_}+\frac{3}{\_}=\frac{\_}{12}$

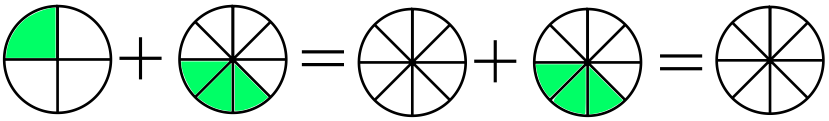
4 )  $\frac{2}{5}+\frac{5}{10}=\frac{4}{\_}+\frac{\_}{10}=\_$

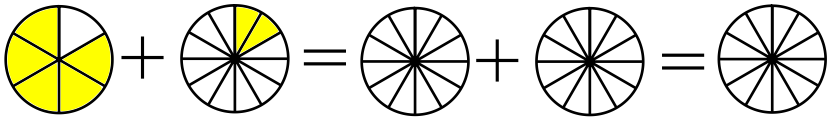
5 )  $\frac{3}{5}+\frac{1}{10}=\frac{\_}{10}+\frac{1}{\_}=\_$

6 )  $\frac{2}{3}+\frac{2}{12}=\_+\_=\frac{10}{12}$

7 )  $\frac{1}{3}+\frac{4}{9}=\_+\_=\_$

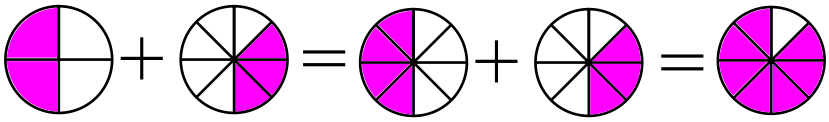
8 )  $\frac{4}{5}+\frac{1}{10}=\_+\frac{1}{\_}=\_$

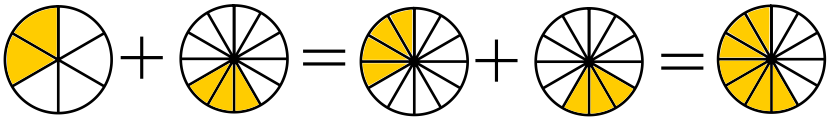
9 )  $\frac{1}{4}+\frac{3}{8}=\_+\frac{\_}{8}=\_$

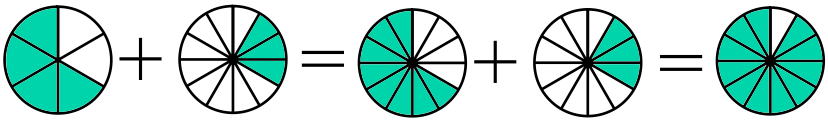
10)  $\frac{5}{6}+\frac{2}{12}=\_+\_=\_$

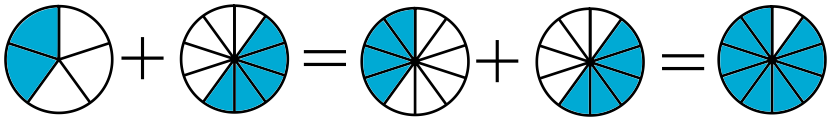
# 10. Suma de fracciones distinto denominador (respuestas)

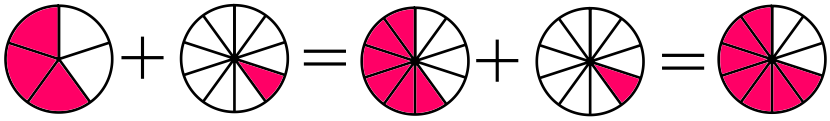
Completa la información faltante en cada ejercicio para determinar la suma de fracciones. Colorea las rebanadas y escribe la fracción.

1 )  $\frac{2}{4}+\frac{3}{8}=\frac{4}{8}+\frac{3}{8}=\frac{7}{8}$

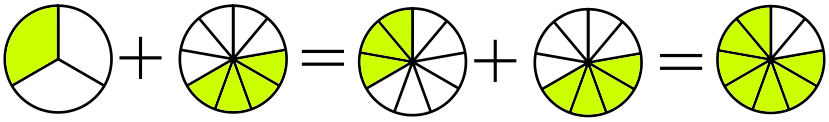
2 )  $\frac{2}{6}+\frac{3}{12}=\frac{4}{12}+\frac{3}{12}=\frac{7}{12}$

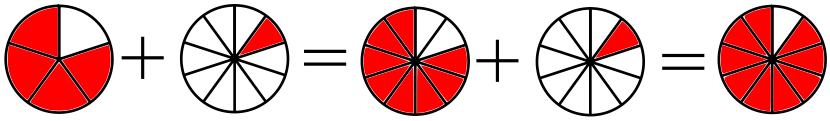
3 )  $\frac{4}{6}+\frac{3}{12}=\frac{8}{12}+\frac{3}{12}=\frac{11}{12}$

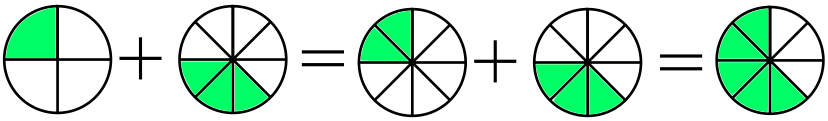
4 )  $\frac{2}{5}+\frac{5}{10}=\frac{4}{10}+\frac{5}{10}=\frac{9}{10}$

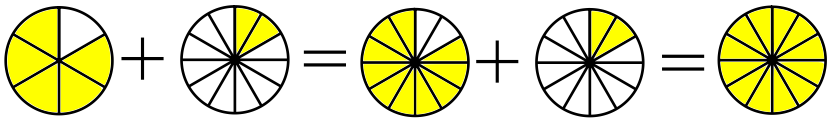
5 )  $\frac{3}{5}+\frac{1}{10}=\frac{6}{10}+\frac{1}{10}=\frac{7}{10}$

6 )  $\frac{2}{3}+\frac{2}{12}=\frac{8}{12}+\frac{2}{12}=\frac{10}{12}$

7 )  $\frac{1}{3}+\frac{4}{9}=\frac{3}{9}+\frac{4}{9}=\frac{7}{9}$

8 )  $\frac{4}{5}+\frac{1}{10}=\frac{8}{10}+\frac{1}{10}=\frac{9}{10}$

9 )  $\frac{1}{4}+\frac{3}{8}=\frac{2}{8}+\frac{3}{8}=\frac{5}{8}$

10)  $\frac{5}{6}+\frac{2}{12}=\frac{10}{12}+\frac{2}{12}=\frac{12}{12}$

# 11. Suma y resta de fracciones

Completa la información faltante en cada ejercicio para determinar la suma o resta de fracciones.

1 ) $\frac{3}{4} - \frac{2}{5} = \frac{(5)(3)}{(5)(4)} - \frac{(4)(2)}{(4)(5)} = \frac{15}{20} - \frac{8}{20} = \frac{\quad}{20}$

2 ) $\frac{1}{4} + \frac{1}{2} = \frac{1}{\quad} + \frac{(\_)(1)}{(\_)(2)} = \frac{1}{4} + \frac{2}{4} = \frac{\quad}{\quad}$

3 ) $\frac{1}{3} + \frac{2}{5} = \frac{(\_)(1)}{(\_)(3)} + \frac{(\_)(2)}{(\_)(5)} = \frac{5}{15} + \frac{6}{15} = \frac{\quad}{15}$

4 ) $\frac{1}{2} + \frac{5}{10} = \frac{(\_)(1)}{(\_)(2)} + \frac{5}{10} = \frac{5}{10} + \frac{5}{10} = \frac{\quad}{\quad}$

5 ) $\frac{1}{4} + \frac{1}{3} = \frac{(\_)(1)}{(\_)(4)} + \frac{(\_)(1)}{(\_)(3)} = \frac{\quad}{12} + \frac{4}{12} = \frac{7}{\quad}$

6 ) $\frac{3}{4} - \frac{1}{2} = \frac{3}{4} - \frac{(\_)(1)}{(\_)(2)} = \frac{3}{4} - \frac{2}{\quad} = \frac{\quad}{4}$

7 ) $\frac{4}{5} - \frac{1}{2} = \frac{(\_)(4)}{(\_)(5)} - \frac{(\_)(1)}{(\_)(2)} = \frac{8}{\quad} - \frac{\quad}{10} = \frac{3}{\quad}$

8 ) $\frac{3}{10} + \frac{3}{5} = \frac{3}{10} + \frac{(\_)(3)}{(\_)(5)} = \frac{3}{\quad} + \frac{6}{\quad} = \frac{\quad}{10}$

9 ) $\frac{1}{2} - \frac{1}{5} = \frac{(\_)(1)}{(\_)(2)} - \frac{(\_)(1)}{(\_)(5)} = \frac{\quad}{10} - \frac{\quad}{10} = \frac{3}{\quad}$

10 ) $\frac{4}{5} - \frac{1}{4} = \frac{(\_)(4)}{(\_)(5)} - \frac{(\_)(1)}{(\_)(4)} = \frac{\quad}{\quad} - \frac{\quad}{\quad} = \frac{\quad}{20}$

# 11. Suma y resta de fracciones (respuestas)

Completa la información faltante en cada ejercicio para determinar la suma o resta de fracciones.

1 ) $\frac{3}{4} - \frac{2}{5} = \frac{(5)(3)}{(5)(4)} - \frac{(4)(2)}{(4)(5)} = \frac{15}{20} - \frac{8}{20} = \frac{7}{20}$

2 ) $\frac{1}{4} + \frac{1}{2} = \frac{1}{4} + \frac{(2)(1)}{(2)(2)} = \frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

3 ) $\frac{1}{3} + \frac{2}{5} = \frac{(5)(1)}{(5)(3)} + \frac{(3)(2)}{(3)(5)} = \frac{5}{15} + \frac{6}{15} = \frac{11}{15}$

4 ) $\frac{1}{2} + \frac{5}{10} = \frac{(5)(1)}{(5)(2)} + \frac{5}{10} = \frac{5}{10} + \frac{5}{10} = \frac{10}{10}$

5 ) $\frac{1}{4} + \frac{1}{3} = \frac{(3)(1)}{(3)(4)} + \frac{(4)(1)}{(4)(3)} = \frac{3}{12} + \frac{4}{12} = \frac{7}{12}$

6 ) $\frac{3}{4} - \frac{1}{2} = \frac{3}{4} - \frac{(2)(1)}{(2)(2)} = \frac{3}{4} - \frac{2}{4} = \frac{1}{4}$

7 ) $\frac{4}{5} - \frac{1}{2} = \frac{(2)(4)}{(2)(5)} - \frac{(5)(1)}{(5)(2)} = \frac{8}{10} - \frac{5}{10} = \frac{3}{10}$

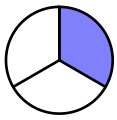
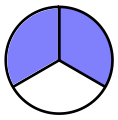
8 ) $\frac{3}{10} + \frac{3}{5} = \frac{3}{10} + \frac{(2)(3)}{(2)(5)} = \frac{3}{10} + \frac{6}{10} = \frac{9}{10}$

9 ) $\frac{1}{2} - \frac{1}{5} = \frac{(5)(1)}{(5)(2)} - \frac{(2)(1)}{(2)(5)} = \frac{5}{10} - \frac{2}{10} = \frac{3}{10}$

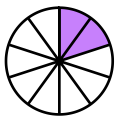
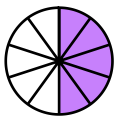
10 ) $\frac{4}{5} - \frac{1}{4} = \frac{(4)(4)}{(4)(5)} - \frac{(5)(1)}{(5)(4)} = \frac{16}{20} - \frac{5}{20} = \frac{11}{20}$

# 12. Comparación de fracciones

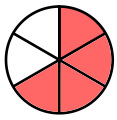
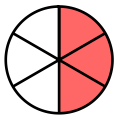
Escribe el signo <, > ó = según corresponda.

1 )  

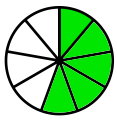
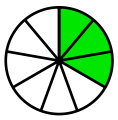
$\frac{1}{3}$ ___ $\frac{2}{3}$

2 )  

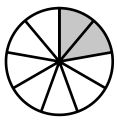
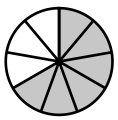
$\frac{2}{10}$ ___ $\frac{5}{10}$

3 )  

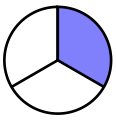
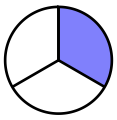
$\frac{4}{6}$ ___ $\frac{3}{6}$

4 )  

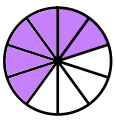
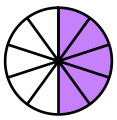
$\frac{5}{9}$ ___ $\frac{3}{9}$

5 )  

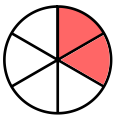
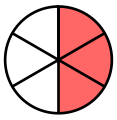
$\frac{2}{9}$ ___ $\frac{6}{9}$

6 )  

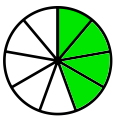
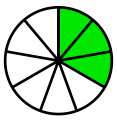
$\frac{1}{3}$ ___ $\frac{1}{3}$

7 )  

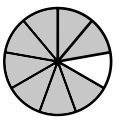
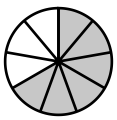
$\frac{6}{10}$ ___ $\frac{5}{10}$

8 )  

$\frac{2}{6}$ ___ $\frac{3}{6}$

9 )  

$\frac{4}{9}$ ___ $\frac{3}{9}$

10 )  

$\frac{8}{9}$ ___ $\frac{6}{9}$

# 12. Comparación de fracciones (respuestas)

Escribe el signo <, > ó = según corresponda.

1 )  $\frac{1}{3} \underline{\quad<\quad} \frac{2}{3}$

2 )  $\frac{2}{10} \underline{\quad<\quad} \frac{5}{10}$

3 )  $\frac{4}{6} \underline{\quad>\quad} \frac{3}{6}$

4 )  $\frac{5}{9} \underline{\quad>\quad} \frac{3}{9}$

5 )  $\frac{2}{9} \underline{\quad<\quad} \frac{6}{9}$

6 )  $\frac{1}{3} \underline{\quad=\quad} \frac{1}{3}$

7 )  $\frac{6}{10} \underline{\quad>\quad} \frac{5}{10}$

8 )  $\frac{2}{6} \underline{\quad<\quad} \frac{3}{6}$

9 )  $\frac{4}{9} \underline{\quad>\quad} \frac{3}{9}$

10)  $\frac{8}{9} \underline{\quad>\quad} \frac{6}{9}$

# 13. Comparación de fracciones

En cada ejercicio, escribe <, > ó = en las cajas, según sea el caso. Completa la información que haga falta.

1 ) $\frac{2}{4}$ ☐ $\frac{2}{3}$

$\frac{(2)(3)}{(4)(3)} = \frac{6}{12}$ $\quad \frac{8}{12} = \frac{(2)(4)}{(3)(4)}$

2 ) $\frac{2}{5}$ ☐ $\frac{1}{3}$

$\frac{(2)(3)}{(5)(3)} = \frac{\quad}{15}$ $\quad \frac{\quad}{15} = \frac{(1)(5)}{(3)(5)}$

3 ) $\frac{2}{6}$ ☐ $\frac{3}{4}$

$\frac{(2)(4)}{(6)(4)} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{(3)(6)}{(4)(6)}$

4 ) $\frac{1}{6}$ ☐ $\frac{1}{3}$

$\frac{(1)(3)}{(6)(3)} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{(1)(6)}{(3)(6)}$

5 ) $\frac{3}{4}$ ☐ $\frac{5}{6}$

$\frac{\quad}{(4)(6)} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{(5)(4)}{(6)(4)}$

6 ) $\frac{1}{3}$ ☐ $\frac{3}{6}$

$\frac{(1)(6)}{(3)(6)} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{\quad}{(3)(6)}$

7 ) $\frac{2}{3}$ ☐ $\frac{1}{4}$

$\frac{(2)(4)}{\quad} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{\quad}{(3)(4)}$

8 ) $\frac{3}{4}$ ☐ $\frac{3}{6}$

$\frac{(3)(6)}{\quad} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{\quad}{(6)(4)}$

9 ) $\frac{2}{4}$ ☐ $\frac{3}{5}$

$\frac{\quad}{\quad} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{\quad}{\quad}$

10 ) $\frac{5}{6}$ ☐ $\frac{3}{5}$

$\frac{\quad}{\quad} = \frac{\quad}{\quad}$ $\quad \frac{\quad}{\quad} = \frac{\quad}{\quad}$

# 13. Comparación de fracciones (respuestas)

En cada ejercicio, escribe <, > ó = en las cajas, según sea el caso.

1 ) $\frac{2}{4}$ $\boxed{<}$ $\frac{2}{3}$

$\frac{(2)(3)}{(4)(3)}=\frac{6}{12}$ $\frac{8}{12}=\frac{(2)(4)}{(3)(4)}$

2 ) $\frac{2}{5}$ $\boxed{>}$ $\frac{1}{3}$

$\frac{(2)(3)}{(5)(3)}=\frac{6}{15}$ $\frac{5}{15}=\frac{(1)(5)}{(3)(5)}$

3 ) $\frac{2}{6}$ $\boxed{<}$ $\frac{3}{4}$

$\frac{(2)(4)}{(6)(4)}=\frac{8}{24}$ $\frac{18}{24}=\frac{(3)(6)}{(4)(6)}$

4 ) $\frac{1}{6}$ $\boxed{<}$ $\frac{1}{3}$

$\frac{(1)(3)}{(6)(3)}=\frac{3}{18}$ $\frac{6}{18}=\frac{(1)(6)}{(3)(6)}$

5 ) $\frac{3}{4}$ $\boxed{<}$ $\frac{5}{6}$

$\frac{(3)(6)}{(4)(6)}=\frac{18}{24}$ $\frac{20}{24}=\frac{(5)(4)}{(6)(4)}$

6 ) $\frac{1}{3}$ $\boxed{<}$ $\frac{3}{6}$

$\frac{(1)(6)}{(3)(6)}=\frac{6}{18}$ $\frac{9}{18}=\frac{(3)(3)}{(3)(6)}$

7 ) $\frac{2}{3}$ $\boxed{>}$ $\frac{1}{4}$

$\frac{(2)(4)}{(3)(4)}=\frac{8}{12}$ $\frac{3}{12}=\frac{(3)(1)}{(3)(4)}$

8 ) $\frac{3}{4}$ $\boxed{>}$ $\frac{3}{6}$

$\frac{(3)(6)}{(4)(6)}=\frac{18}{24}$ $\frac{12}{24}=\frac{(3)(4)}{(6)(4)}$

9 ) $\frac{2}{4}$ $\boxed{<}$ $\frac{3}{5}$

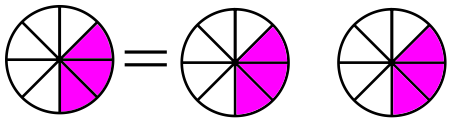
$\frac{(2)(5)}{(4)(5)}=\frac{10}{20}$ $\frac{12}{20}=\frac{(3)(4)}{(5)(4)}$

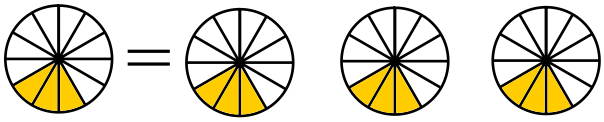
10 ) $\frac{5}{6}$ $\boxed{>}$ $\frac{3}{5}$

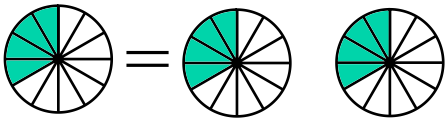
$\frac{(5)(5)}{(6)(5)}=\frac{25}{30}$ $\frac{18}{30}=\frac{(3)(6)}{(5)(6)}$

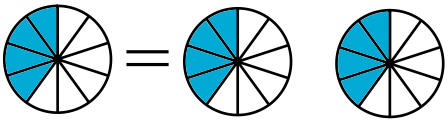
# 14. Multiplicación de fracciones

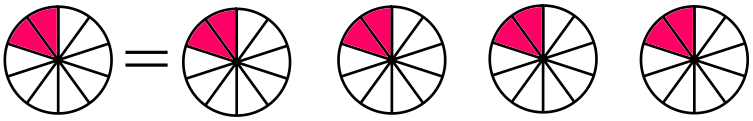
Realiza las multiplicaciones de fracciones por enteros.

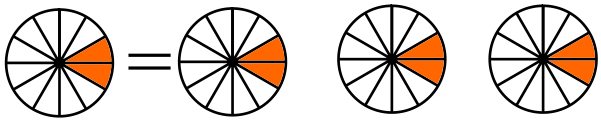
1) 2 x  $\left(\frac{}{1}\right)\left(\frac{}{8}\right)=\frac{6}{8}$

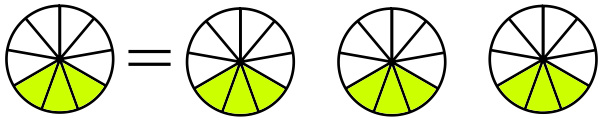
2) 3 x  $\left(\frac{3}{1}\right)\left(\frac{}{12}\right)=\frac{}{12}$

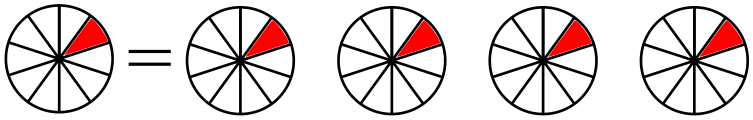
3) 2 x  $\left(\frac{}{1}\right)\left(\frac{}{12}\right)=\frac{}{12}$

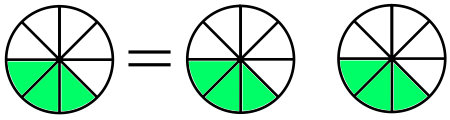
4) 2 x  $\left(\frac{}{1}\right)\left(\frac{}{10}\right)=\frac{8}{}$

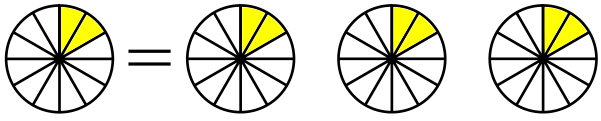
5) 4 x  $\left(\frac{}{1}\right)\left(\frac{}{}\right)=\frac{}{10}$

6) 3 x  $\left(\frac{}{1}\right)\left(\frac{2}{12}\right)=\frac{6}{}$

7) 3 x  $\left(\frac{}{1}\right)\left(\frac{}{}\right)=\frac{9}{9}$

8) 4 x  $\left(\frac{4}{1}\right)\left(\frac{}{}\right)=\frac{}{}$

9) 2 x  $\left(\frac{}{}\right)\left(\frac{}{}\right)=\frac{}{}$

10) 3 x  $\left(\frac{}{}\right)\left(\frac{}{}\right)=\frac{}{}$

# 14. Multiplicación de fracciones (respuestas)

Realiza las multiplicaciones de fracciones por enteros.

1) $2 \times \frac{2}{1} = \frac{3}{8} = \frac{6}{8}$

2) $3 \times \frac{3}{1} = \frac{3}{12} = \frac{9}{12}$

3) $2 \times \frac{2}{1} = \frac{4}{12} = \frac{8}{12}$

4) $2 \times \frac{2}{1} = \frac{4}{10} = \frac{8}{10}$

5) $4 \times \frac{4}{1} = \frac{2}{10} = \frac{8}{10}$

6) $3 \times \frac{3}{1} = \frac{2}{12} = \frac{6}{12}$

7) $3 \times \frac{3}{1} = \frac{3}{9} = \frac{9}{9}$

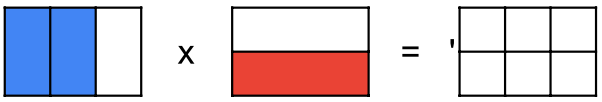
8) $4 \times \frac{4}{1} = \frac{1}{10} = \frac{4}{10}$

9) $2 \times \frac{2}{1} = \frac{3}{8} = \frac{6}{8}$

10) $3 \times \frac{3}{1} = \frac{2}{12} = \frac{6}{12}$

# 15. Multiplicación de fracciones

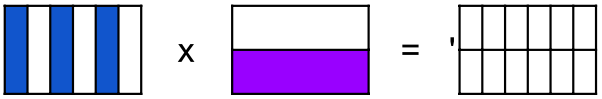
Realiza las siguientes multiplicaciones de fracciones. Colorea las fracciones y escribe la fracción con número.

1) 

$\frac{2}{3} \times \frac{1}{2} = \frac{\ }{\ }$

2) 

$\frac{2}{4} \times \frac{1}{2} = \frac{\ }{\ }$

3) 

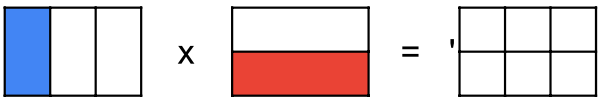
$\frac{3}{6} \times \frac{1}{2} = \frac{\ }{\ }$

4) 

$\frac{2}{3} \times \frac{2}{4} = \frac{\ }{\ }$

5) 

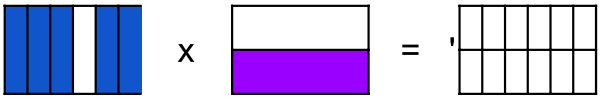
$\frac{3}{6} \times \frac{2}{4} = \frac{\ }{\ }$

6) 

$\frac{1}{3} \times \frac{1}{2} = \frac{\ }{\ }$

7) 

$\frac{3}{4} \times \frac{1}{2} = \frac{\ }{\ }$

8) 

$\frac{5}{6} \times \frac{1}{2} = \frac{\ }{\ }$

9) 

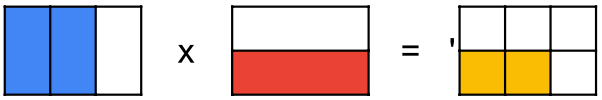
$\frac{2}{3} \times \frac{3}{4} = \frac{\ }{\ }$

10) 

$\frac{4}{6} \times \frac{3}{4} = \frac{\ }{\ }$

# 15. Multiplicación de fracciones (respuestas)

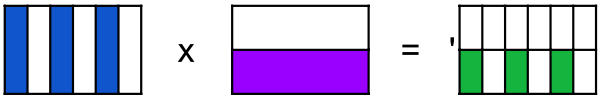
Realiza las siguientes multiplicaciones de fracciones. Colorea las fracciones y escribe la fracción con número.

1) 

$\frac{2}{3} \times \frac{1}{2} = \frac{2}{6}$

2) 

$\frac{2}{4} \times \frac{1}{2} = \frac{2}{8}$

3) 

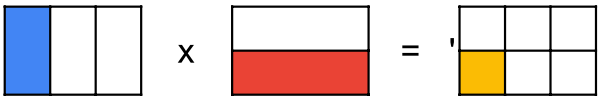
$\frac{3}{6} \times \frac{1}{2} = \frac{3}{12}$

4) 

$\frac{2}{3} \times \frac{2}{4} = \frac{4}{12}$

5) 

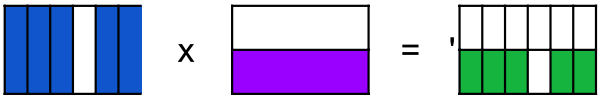
$\frac{3}{6} \times \frac{2}{4} = \frac{6}{24}$

6) 

$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$

7) 

$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$

8) 

$\frac{5}{6} \times \frac{1}{2} = \frac{5}{12}$

9) 

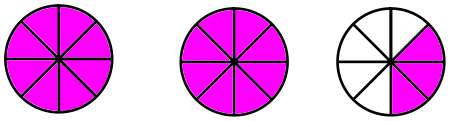
$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$

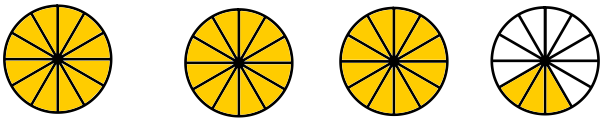
10) 

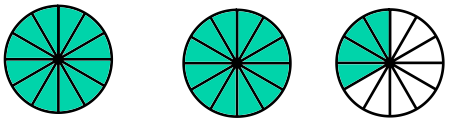
$\frac{4}{6} \times \frac{3}{4} = \frac{12}{24}$

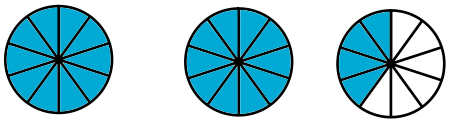
# 16. Fracciones impropias

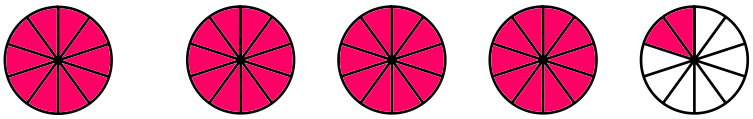
Escribe las fracciones impropias y conviértelas a fracciones mixtas.

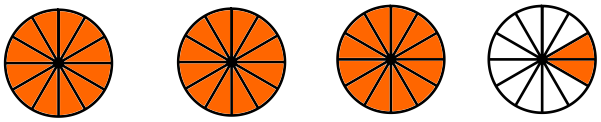
1 )  $\frac{19}{8} = 2\frac{3}{8}$

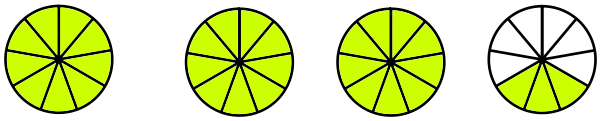
2 )  $\frac{39}{12} = 3\frac{\ }{12}$

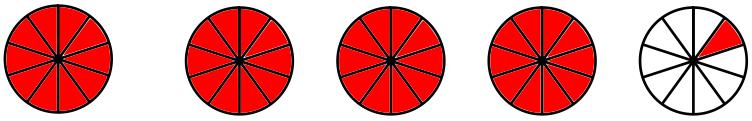
3 )  $\frac{\ }{12} = 2\frac{4}{\ }$

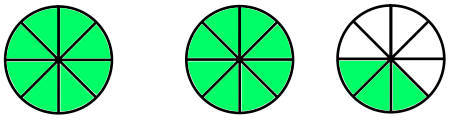
4 )  $\frac{\ }{\ } = 2\frac{\ }{10}$

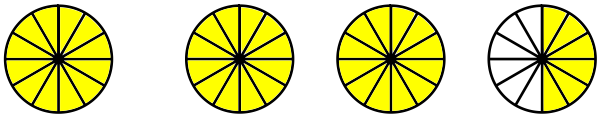
5 )  $\frac{\ }{\ } = 4\frac{2}{\ }$

6 )  $\frac{\ }{12} = \frac{\ }{\ }$

7 )  $\frac{30}{\ } = \frac{\ }{\ }$

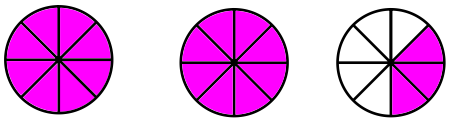
8 )  $\frac{\ }{10} = \frac{1}{\ }$

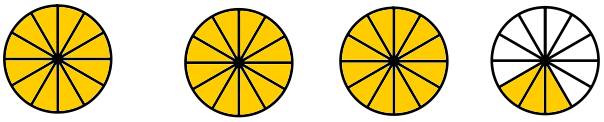
9 )  $\frac{\ }{\ } = \frac{\ }{8}$

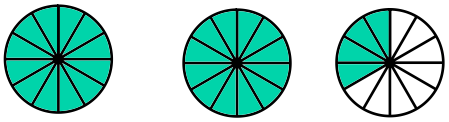
10 )  $\frac{\ }{\ } = \frac{\ }{\ }$

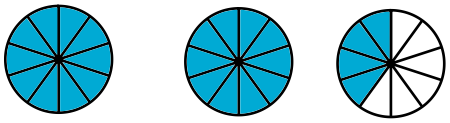
# 16. Fracciones impropias (respuestas)

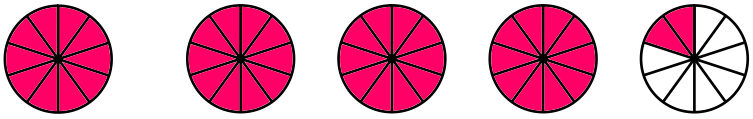
Escribe las fracciones impropias y conviértelas a fracciones mixtas.

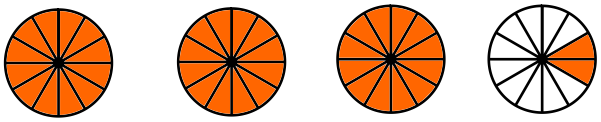
1 )  $\frac{19}{8} = 2\frac{3}{8}$

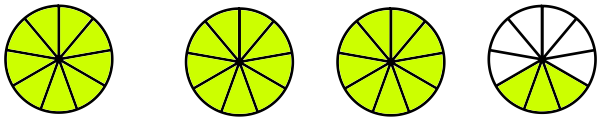
2 )  $\frac{39}{12} = 3\frac{3}{12}$

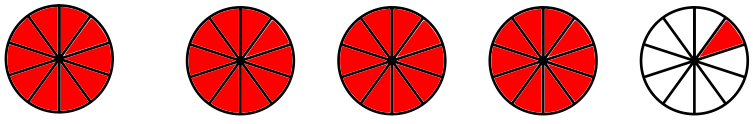
3)  $\frac{28}{12} = 2\frac{4}{12}$

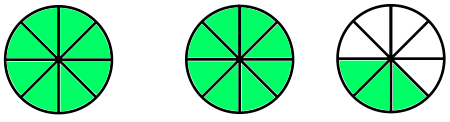
4)  $\frac{24}{10} = 2\frac{4}{10}$

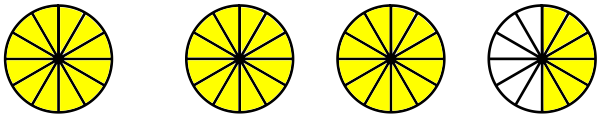
5)  $\frac{42}{10} = 4\frac{2}{10}$

6)  $\frac{38}{12} = 3\frac{2}{12}$

7)  $\frac{30}{9} = 3\frac{3}{9}$

8)  $\frac{41}{10} = 4\frac{1}{10}$

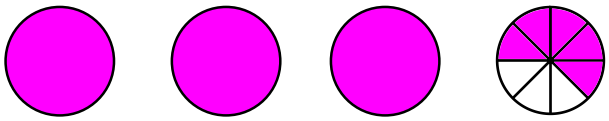
9)  $\frac{19}{8} = 2\frac{3}{8}$

10)  $\frac{42}{12} = 3\frac{6}{12}$

# 17. Fracciones mixtas

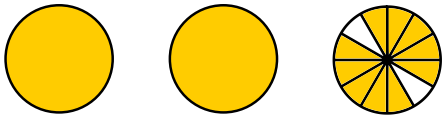
Escribe las fracciones mixtas y conviértelas a fracciones impropias.

1 )



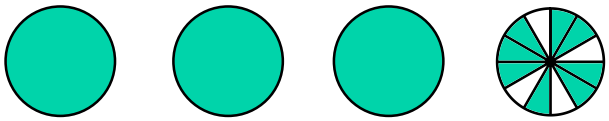
$3\frac{}{8} = \frac{29}{8}$

2 )



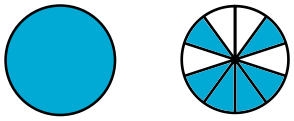
$2\frac{10}{} = \frac{}{12}$

3 )



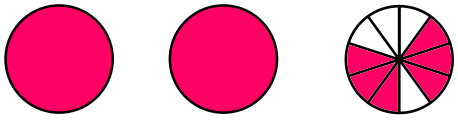
$\frac{}{12} = \frac{44}{12}$

4 )



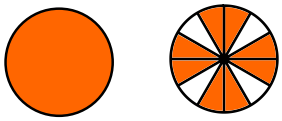
$1\frac{}{10} = \frac{}{10}$

5 )



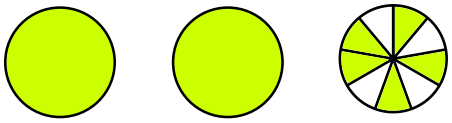
$\frac{6}{} = \frac{}{10}$

6 )



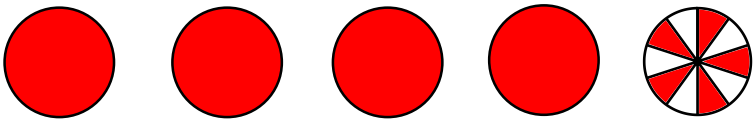
$\frac{8}{} = \frac{}{12}$

7 )



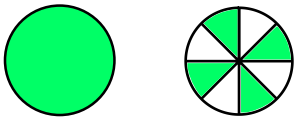
$\frac{}{9} = \frac{}{9}$

8 )



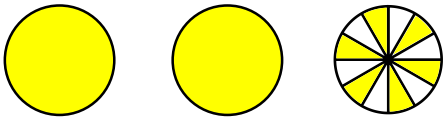
$4\frac{}{} = \frac{}{10}$

9 )



$1\frac{}{8} = \frac{}{}$

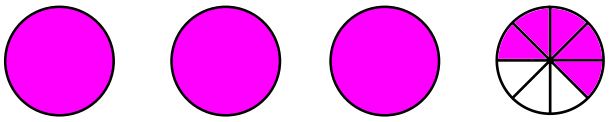
10 )

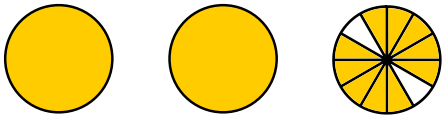


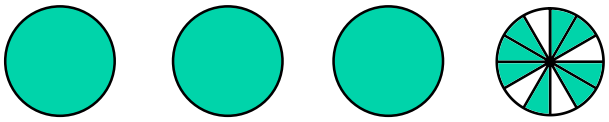
$\frac{}{} = \frac{}{}$

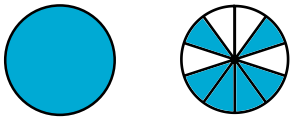
# 17. Fracciones mixtas (respuestas)

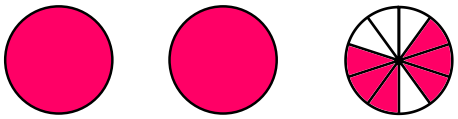
Escribe las fracciones mixtas y conviértelas a fracciones impropias.

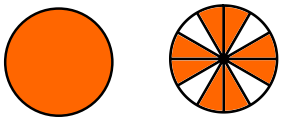
1 )  $3\frac{5}{8} = \frac{29}{8}$

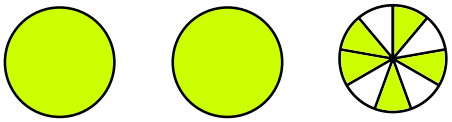
2 )  $2\frac{10}{12} = \frac{34}{12}$

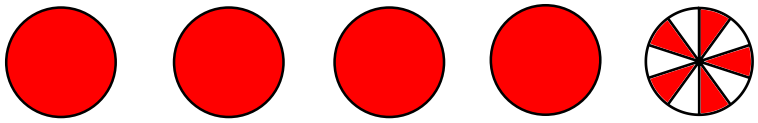
3 )  $3\frac{8}{12} = \frac{44}{12}$

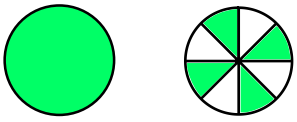
4 )  $1\frac{6}{10} = \frac{16}{10}$

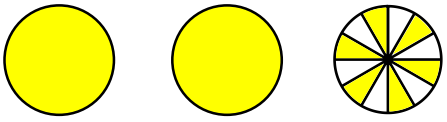
5 )  $2\frac{6}{10} = \frac{26}{10}$

6 )  $1\frac{8}{12} = \frac{20}{12}$

7 )  $2\frac{5}{9} = \frac{23}{9}$

8 )  $4\frac{5}{10} = \frac{45}{10}$

9 )  $1\frac{4}{8} = \frac{12}{8}$

10 )  $2\frac{6}{12} = \frac{30}{12}$

# 18. División de fracciones

Resuelve las siguientes divisiones de fracciones. Reduce las fracciones y cuando sea el caso, convierte las fracciones impropias a mixtas.

1 ) $\frac{1}{9} \div \frac{2}{3} = \frac{(1)\,(3)}{(9)\,(2)} = \frac{3}{18} = \frac{1}{6}$

2 ) $\frac{1}{9} \div \frac{1}{3} = \frac{(1)\,(3)}{(9)\,(1)} = \frac{3}{9} = \frac{\quad}{3}$

3 ) $\frac{5}{9} \div \frac{1}{4} = \frac{(5)\,(\_)}{(9)\,(1)} = \frac{20}{9} = 2\frac{\quad}{9}$

4 ) $\frac{1}{9} \div \frac{5}{6} = \frac{(1)\,(6)}{(9)\,(\_)} = \frac{\quad}{45} = \frac{2}{\quad}$

5 ) $\frac{3}{5} \div \frac{6}{7} = \frac{(3)\,(\_)}{(5)\,(6)} = \frac{21}{\quad} = \frac{\quad}{10}$

6 ) $\frac{8}{9} \div \frac{5}{6} = \frac{(8)\,(\_)}{(9)\,(\_)} = \frac{48}{45} = \frac{\quad}{15} = 1\frac{1}{\quad}$

7 ) $\frac{2}{4} \div \frac{7}{8} = \frac{(2)\,(\_)}{(4)\,(\_)} = \frac{\quad}{28} = \frac{4}{\quad}$

8 ) $\frac{1}{2} \div \frac{2}{4} = \frac{(1)\,(\_)}{(2)\,(\_)} = \frac{\quad}{\quad} = 1$

9 ) $\frac{3}{5} \div \frac{1}{2} = \frac{(3)\,(\_)}{(5)\,(\_)} = \frac{\quad}{\quad} = 1\frac{\quad}{5}$

10 ) $\frac{6}{9} \div \frac{1}{6} = \frac{(6)\,(\_)}{(9)\,(\_)} = \frac{\quad}{\quad} = \frac{\quad}{1} = 4$

# 18. División de fracciones (respuestas)

Resuelve las siguientes divisiones de fracciones. Reduce las fracciones y cuando sea el caso, convierte las fracciones impropias a mixtas.

1 ) $\frac{1}{9} \div \frac{2}{3} = \frac{(1)(3)}{(9)(2)} = \frac{3}{18} = \frac{1}{6}$

2 ) $\frac{1}{9} \div \frac{1}{3} = \frac{(1)(3)}{(9)(1)} = \frac{3}{9} = \frac{1}{3}$

3 ) $\frac{5}{9} \div \frac{1}{4} = \frac{(5)(4)}{(9)(1)} = \frac{20}{9} = 2\frac{2}{9}$

4 ) $\frac{1}{9} \div \frac{5}{6} = \frac{(1)(6)}{(9)(5)} = \frac{6}{45} = \frac{2}{15}$

5 ) $\frac{3}{5} \div \frac{6}{7} = \frac{(3)(7)}{(5)(6)} = \frac{21}{30} = \frac{7}{10}$

6 ) $\frac{8}{9} \div \frac{5}{6} = \frac{(8)(6)}{(9)(5)} = \frac{48}{45} = \frac{16}{15} = 1\frac{1}{15}$

7 ) $\frac{2}{4} \div \frac{7}{8} = \frac{(2)(8)}{(4)(7)} = \frac{16}{28} = \frac{4}{7}$

8 ) $\frac{1}{2} \div \frac{2}{4} = \frac{(1)(4)}{(2)(2)} = \frac{4}{4} = 1$

9 ) $\frac{3}{5} \div \frac{1}{2} = \frac{(3)(2)}{(5)(1)} = \frac{6}{5} = 1\frac{1}{5}$

10 ) $\frac{6}{9} \div \frac{1}{6} = \frac{(6)(6)}{(9)(1)} = \frac{36}{9} = \frac{4}{1} = 4$

# 19. Operaciones con fracciones impropias y mixtas

Resuelve las siguientes operaciones con fracciones mixtas. Primero convierte a fracciones impropias, y al final convierte en fracciones mixtas si es el caso.

1) $3\frac{1}{2} + 2\frac{5}{10} = \frac{7}{2} + \frac{25}{10} = \frac{\quad}{10} + \frac{25}{\quad} = \frac{60}{10} = 6$

2) $3\frac{8}{10} + 4\frac{4}{5} = \frac{\quad}{10} + \frac{24}{5} = \frac{38}{10} + \frac{48}{10} = \frac{\quad}{10} = 8\frac{6}{10}$

3) $4\frac{1}{2} - 3\frac{1}{3} = \frac{\quad}{2} - \frac{10}{3} = \frac{27}{6} - \frac{\quad}{6} = \frac{7}{6} = 1\frac{1}{6}$

4) $7\frac{1}{2} - 3\frac{1}{4} = \frac{15}{2} - \frac{\quad}{4} = \frac{30}{4} - \frac{\quad}{4} = \frac{17}{4} = 4\frac{\quad}{4}$

5) $\left(2\frac{1}{3}\right)\left(2\frac{1}{4}\right) = \left(\frac{\quad}{3}\right)\left(\frac{9}{4}\right) = \frac{\quad}{12} = \frac{21}{4} = 5\frac{\quad}{4}$

6) $\left(2\frac{1}{2}\right)\left(3\frac{1}{2}\right) = \left(\frac{5}{\quad}\right)\left(\frac{\quad}{2}\right) = \frac{35}{\quad} = 8\frac{\quad}{4}$

7) $\left(2\frac{1}{2}\right)\left(2\frac{3}{5}\right) = \left(\frac{\quad}{2}\right)\left(\frac{\quad}{5}\right) = \frac{\quad}{10} = \frac{13}{2} = \frac{1}{\quad}$

8) $4\frac{2}{3} \div 4\frac{4}{5} = \left(\frac{\quad}{3}\right)\left(\frac{5}{24}\right) = \frac{\quad}{72} = \frac{35}{36}$

9) $4\frac{1}{2} \div 2\frac{3}{5} = \left(\frac{\quad}{2}\right)\left(\frac{\quad}{13}\right) = \frac{\quad}{\quad} = 1\frac{19}{26}$

10) $2\frac{1}{4} \div 2\frac{3}{10} = \left(\frac{\quad}{\quad}\right)\left(\frac{10}{23}\right) = \frac{\quad}{92} = \frac{\quad}{46}$

# 19. Operaciones con fracciones impropias y mixtas (respuestas)

Resuelve las siguientes operaciones con fracciones mixtas. Primero convierte a fracciones impropias, y al final convierte en fracciones mixtas si es el caso.

1) $3\frac{1}{2} + 2\frac{5}{10} = \frac{7}{2} + \frac{25}{10} = \frac{35}{10} + \frac{25}{10} = \frac{60}{10} = 6$

2) $3\frac{8}{10} + 4\frac{4}{5} = \frac{38}{10} + \frac{24}{5} = \frac{38}{10} + \frac{48}{10} = \frac{86}{10} = 8\frac{6}{10}$

3) $4\frac{1}{2} - 3\frac{1}{3} = \frac{9}{2} - \frac{10}{3} = \frac{27}{6} - \frac{20}{6} = \frac{7}{6} = 1\frac{1}{6}$

4) $7\frac{1}{2} - 3\frac{1}{4} = \frac{15}{2} - \frac{13}{4} = \frac{30}{4} - \frac{13}{4} = \frac{17}{4} = 4\frac{1}{4}$

5) $\left(2\frac{1}{3}\right)\left(2\frac{1}{4}\right) = \left(\frac{7}{3}\right)\left(\frac{9}{4}\right) = \frac{63}{12} = \frac{21}{4} = 5\frac{1}{4}$

6) $\left(2\frac{1}{2}\right)\left(3\frac{1}{2}\right) = \left(\frac{5}{2}\right)\left(\frac{7}{2}\right) = \frac{35}{4} = 8\frac{3}{4}$

7) $\left(2\frac{1}{2}\right)\left(2\frac{3}{5}\right) = \left(\frac{5}{2}\right)\left(\frac{13}{5}\right) = \frac{65}{10} = \frac{13}{2} = 6\frac{1}{2}$

8) $4\frac{2}{3} \div 4\frac{4}{5} = \left(\frac{14}{3}\right)\left(\frac{5}{24}\right) = \frac{70}{72} = \frac{35}{36}$

9) $4\frac{1}{2} \div 2\frac{3}{5} = \left(\frac{9}{2}\right)\left(\frac{5}{13}\right) = \frac{45}{26} = 1\frac{19}{26}$

10) $2\frac{1}{4} \div 2\frac{3}{10} = \left(\frac{9}{4}\right)\left(\frac{10}{23}\right) = \frac{90}{92} = \frac{45}{46}$

# 20. Operaciones con fracciones propias

Resuelve las siguientes operaciones. Reduce las fracciones a su mínima expresión y al final convierte en fracciones mixtas si es el caso.

1) $\frac{1}{2} + 2 = \frac{1}{2} + \frac{\_}{2} = \frac{5}{2} = 2\frac{\_}{2}$

2) $4 - \frac{8}{10} = \frac{40}{10} - \frac{8}{10} = \frac{\_}{10} = 3\frac{\_}{10}$

3) $\frac{2}{4} + \frac{4}{5} + \frac{2}{10} = \frac{\_}{20} + \frac{16}{\_} + \frac{\_}{20} = \frac{30}{20} = \frac{\_}{2} = 1\frac{1}{2}$

4) $\frac{3}{5} + \frac{1}{2} - \frac{2}{3} = \frac{18}{\_} + \frac{\_}{30} - \frac{20}{\_} = \frac{\_}{30}$

5) $\frac{2}{3} + \frac{5}{10} - \frac{1}{4} = \frac{\_}{60} + \frac{\_}{60} - \frac{\_}{60} = \frac{55}{60} = \frac{\_}{12}$

6) $\frac{1}{2} + \frac{4}{5} + \frac{8}{10} = \frac{\_}{10} + \frac{\_}{10} + \frac{\_}{10} = \frac{\_}{10} = 2\frac{1}{10}$

7) $\left(\frac{8}{10}\right)\left(\frac{2}{3}\right) = \frac{(\cancel{2})(\_)(2)}{(\cancel{2})(5)(\_)} = \frac{8}{15}$

8) $\left(\frac{4}{5}\right)\left(\frac{15}{24}\right) = \frac{(\_)(\cancel{2})(\_)(\cancel{5})(1)}{(\cancel{5})(\cancel{2})(3)(\cancel{2})(\_)} = \frac{1}{2}$

9) $\left(\frac{2}{4}\right)\left(\frac{2}{6}\right) = \frac{(\cancel{2})(\_)(1)}{(\_)(\cancel{2})(3)(\_)} = \frac{1}{\_}$

10) $\left(\frac{3}{4}\right)\left(\frac{2}{12}\right) = \frac{(\_)(\cancel{2})(1)}{(\_)(\cancel{2})(\_)(4)} = \frac{}{\_\_}$

# 20. Operaciones con fracciones propias (respuestas).

Resuelve las siguientes operaciones. Reduce las fracciones a su mínima expresión y al final convierte en fracciones mixtas si es el caso.

1) $\frac{1}{2} + 2 = \frac{1}{2} + \frac{4}{2} = \frac{5}{2} = 2\frac{1}{2}$

2) $4 - \frac{8}{10} = \frac{40}{10} - \frac{8}{10} = \frac{32}{10} = 3\frac{2}{10}$

3) $\frac{2}{4} + \frac{4}{5} + \frac{2}{10} = \frac{10}{20} + \frac{16}{20} + \frac{4}{20} = \frac{30}{20} = \frac{3}{2} = 1\frac{1}{2}$

4) $\frac{3}{5} + \frac{1}{2} - \frac{2}{3} = \frac{18}{30} + \frac{15}{30} - \frac{20}{30} = \frac{13}{30}$

5) $\frac{2}{3} + \frac{5}{10} - \frac{1}{4} = \frac{40}{60} + \frac{30}{60} - \frac{15}{60} = \frac{55}{60} = \frac{11}{12}$

6) $\frac{1}{2} + \frac{4}{5} + \frac{8}{10} = \frac{5}{10} + \frac{8}{10} + \frac{8}{10} = \frac{21}{10} = 2\frac{1}{10}$

7) $\left(\frac{8}{10}\right)\left(\frac{2}{3}\right) = \frac{\cancel{(2)}(4)(2)}{\cancel{(2)}(5)(3)} = \frac{8}{15}$

8) $\left(\frac{4}{5}\right)\left(\frac{15}{24}\right) = \frac{\cancel{(2)}\cancel{(2)}\cancel{(3)}\cancel{(5)}(1)}{\cancel{(5)}\cancel{(2)}\cancel{(3)}\cancel{(2)}(2)} = \frac{1}{2}$

9) $\left(\frac{2}{4}\right)\left(\frac{2}{6}\right) = \frac{\cancel{(2)}\cancel{(2)}(1)}{\cancel{(2)}\cancel{(2)}(3)(2)} = \frac{1}{6}$

10) $\left(\frac{3}{4}\right)\left(\frac{2}{12}\right) = \frac{\cancel{(3)}\cancel{(2)}(1)}{(2)\cancel{(2)}\cancel{(3)}(4)} = \frac{1}{8}$

# 21. Conversión entre fracciones y decimales

Realiza las conversiones entre fracciones y decimales.

1 ) $\frac{7}{8}$ =

2 ) = 0.75

3 ) $\frac{8}{10}$ =

4 ) = 0.625

5 ) $\frac{1}{5}$ =

6 ) = 0.5

7 ) $\frac{7}{10}$ =

8 ) = 0.9

9 ) $\frac{1}{4}$ =

10 ) = 0.4

# 21. Conversión entre fracciones y decimales (respuestas)

Realiza las conversiones entre fracciones y decimales.

1 ) $\frac{7}{8}$ = 0.875

2 ) $\frac{3}{4}$ = 0.75

3 ) $\frac{8}{10}$ = 0.8

4 ) $\frac{5}{8}$ = 0.625

5 ) $\frac{1}{5}$ = 0.2

6 ) $\frac{5}{10}$ = 0.5

7 ) $\frac{7}{10}$ = 0.7

8 ) $\frac{9}{10}$ = 0.9

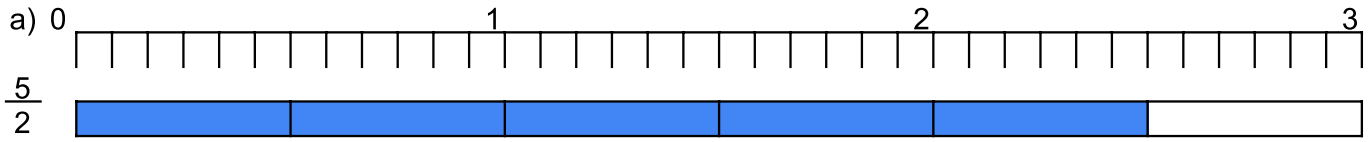
9 ) $\frac{1}{4}$ = 0.25

10 ) $\frac{2}{5}$ = 0.4

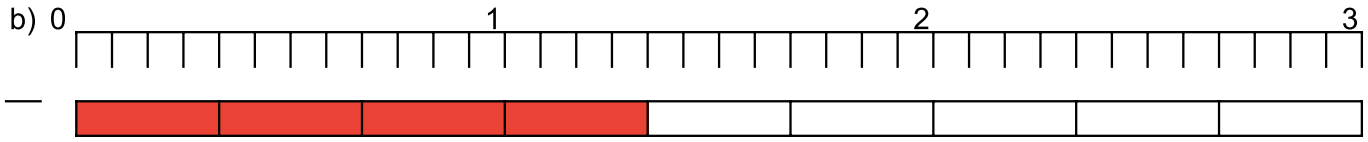
# 22. Fracciones en la recta numérica

Ubica las fracciones en la recta numérica. Colorea las barras o escribe la fracción.

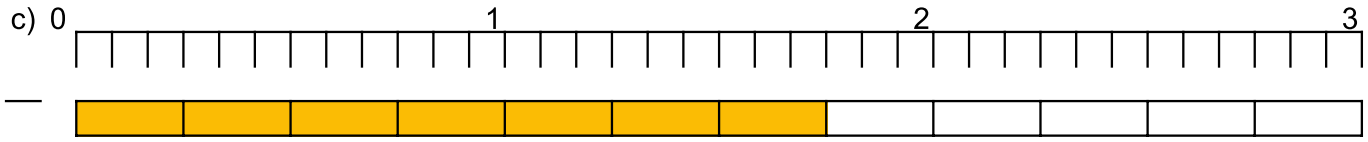
a) $\frac{5}{2}$



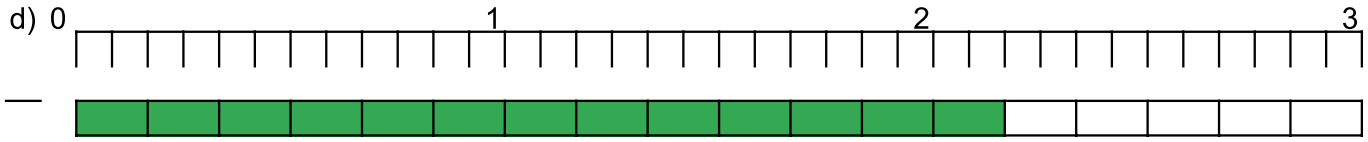

b) $\frac{\quad}{\quad}$



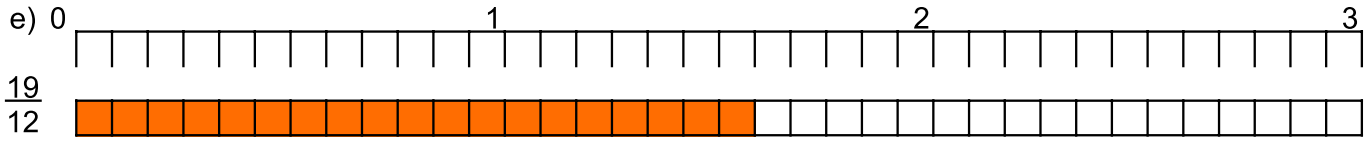

c) $\frac{\quad}{\quad}$



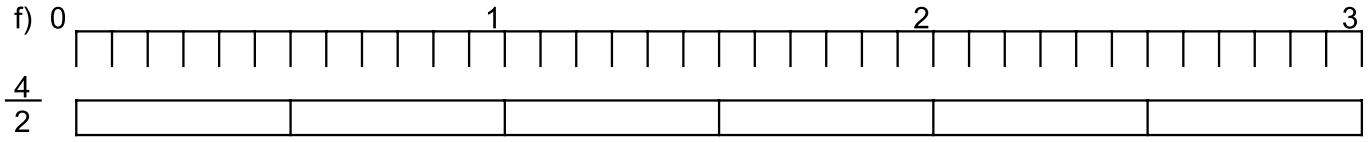

d) $\frac{\quad}{\quad}$



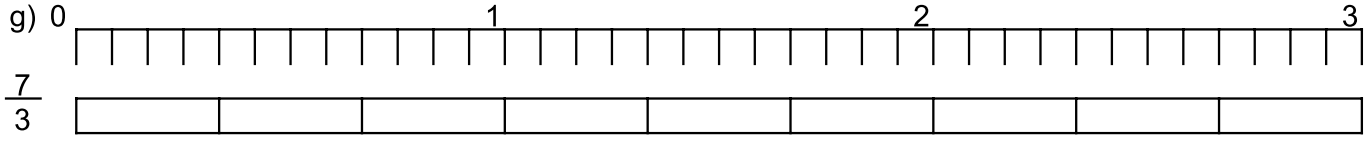

e) $\frac{19}{12}$



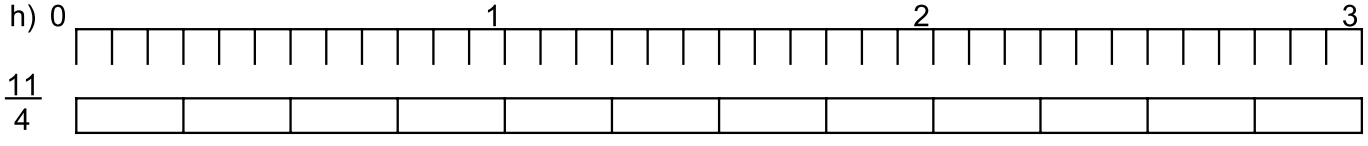

f) $\frac{4}{2}$



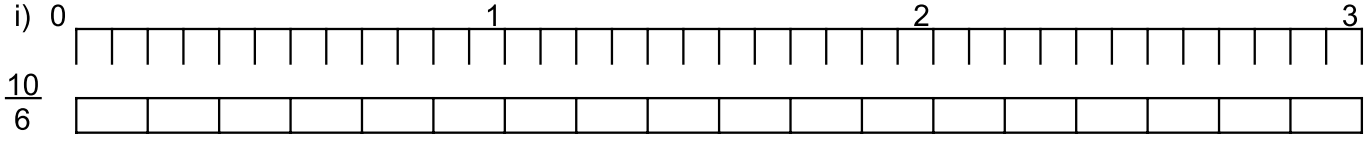

g) $\frac{7}{3}$



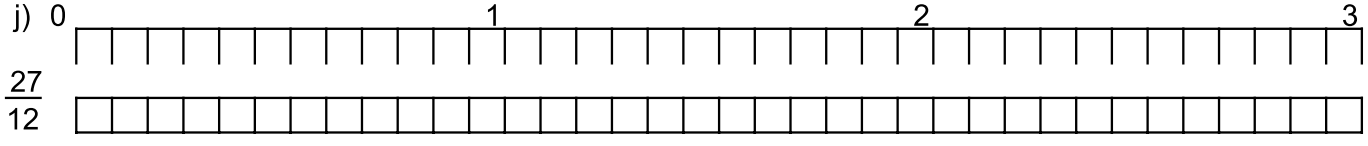

h) $\frac{11}{4}$




i) $\frac{10}{6}$



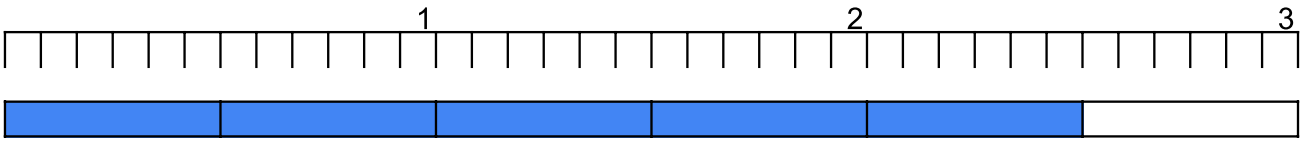

j) $\frac{27}{12}$



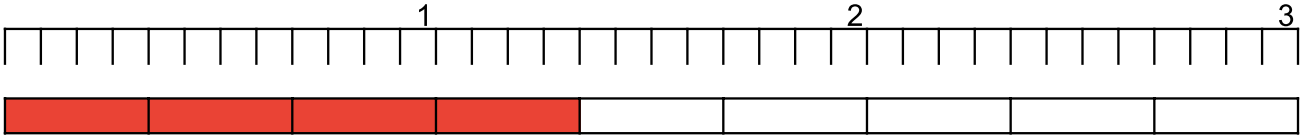
# 22. Fracciones en la recta numérica (respuestas)

Ubica las fracciones en la recta numérica. Colorea las barras o escribe la fracción.

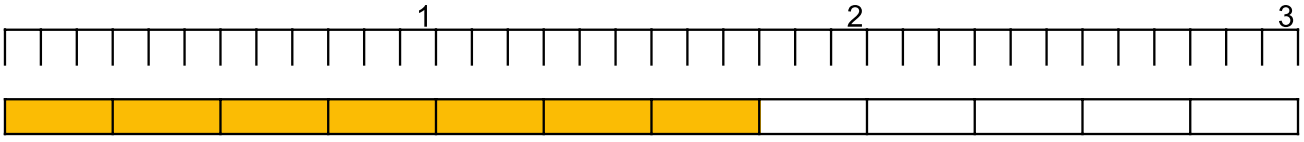
a) $\frac{5}{2}$



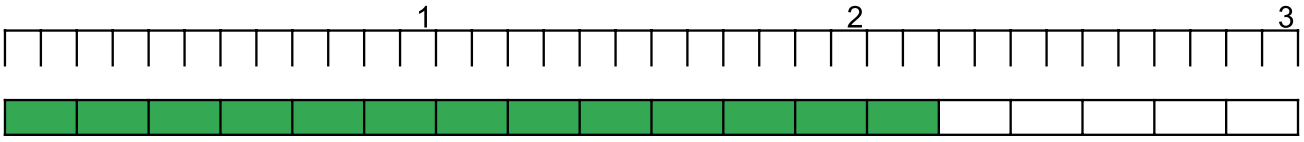

b) $\frac{4}{3}$



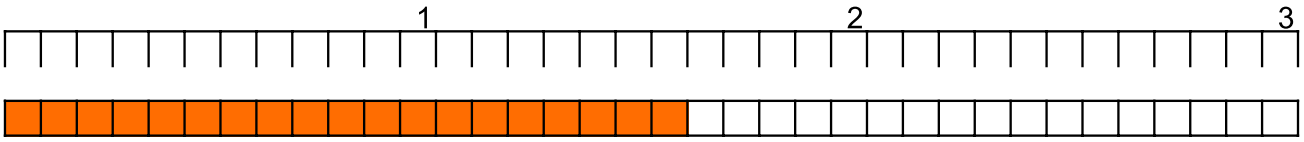

c) $\frac{7}{4}$



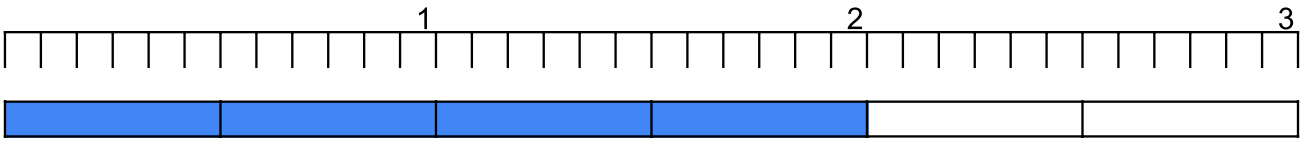

d) $\frac{13}{6}$



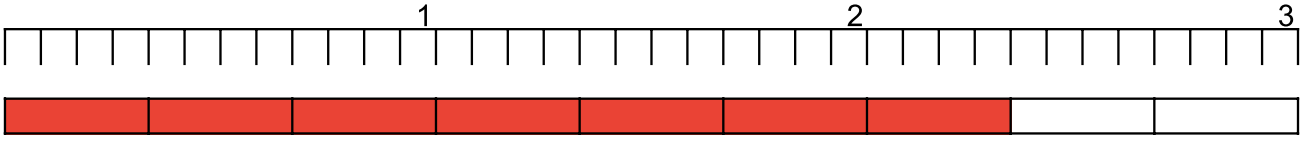

e) $\frac{19}{12}$



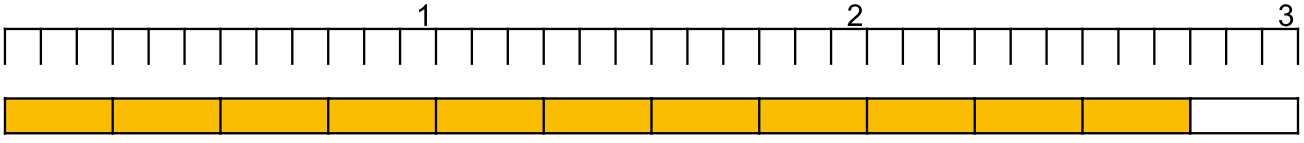

f) $\frac{4}{2}$



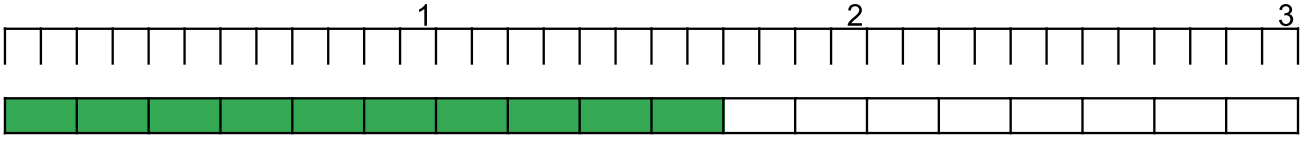

g) $\frac{7}{3}$



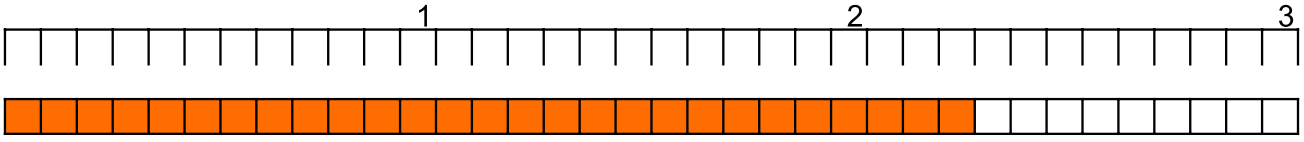

h) $\frac{11}{4}$




i) $\frac{10}{6}$




j) $\frac{27}{12}$



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