

1 What is the same about the answers to the three calculations?

$$\frac{3}{4} + \frac{1}{4} = \boxed{} \quad \frac{2}{5} + \frac{3}{5} = \boxed{} \quad \frac{1}{4} + \frac{1}{4} + \frac{2}{4} = \boxed{}$$

2 Use a bar model to explain why $\frac{3}{5} + \frac{2}{5}$ is equal to 1

3 Use the bar models to work out the subtractions.

a) $1 - \frac{1}{3}$

b) $1 - \frac{2}{3}$

c) $1 - \frac{3}{7}$

4 Work out the subtractions.

- | | |
|----------------------|------------------------|
| a) $1 - \frac{1}{5}$ | e) $1 - \frac{7}{10}$ |
| b) $1 - \frac{2}{5}$ | f) $1 - \frac{9}{11}$ |
| c) $1 - \frac{3}{5}$ | g) $1 - \frac{11}{20}$ |
| d) $1 - \frac{4}{5}$ | h) $1 - \frac{7}{8}$ |

Compare answers with a partner.

Did you get the same answers? Discuss your methods.



5 Work out the additions.

- | | |
|----------------------|-----------------------|
| a) $1 + \frac{2}{5}$ | b) $15 + \frac{1}{3}$ |
| $2 + \frac{2}{5}$ | $15 + \frac{2}{3}$ |
| $3 + \frac{2}{5}$ | $15 + \frac{3}{3}$ |
| $7 + \frac{2}{5}$ | |

c) Is the statement true or false?

$$3 + \frac{5}{4} = 4\frac{1}{4}$$

Talk about it with a partner.

6 Write an addition and a subtraction for the models.

a) $1 + \boxed{} \equiv 2 - \boxed{}$

b) $\boxed{} + \boxed{} \equiv \boxed{} - \boxed{}$

c) $\boxed{} + \boxed{} \equiv \boxed{} - \boxed{}$

5 Work out the additions.

a) $1 + \frac{2}{5}$

b) $15 + \frac{1}{3}$

$2 + \frac{2}{5}$

$15 + \frac{2}{3}$

$3 + \frac{2}{5}$

$15 + \frac{3}{3}$

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

c) Is the statement true or false?

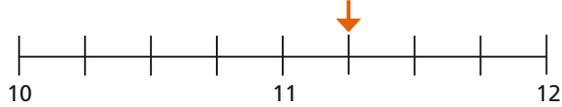
$3 + \frac{5}{4} = 4\frac{1}{4}$

Talk about it with a partner.

6 Write an addition and a subtraction for the models.

a)  $1 + \square \equiv 2 - \square$

b) 
 $\square + \square \equiv \square - \square$

c) 
 $\square + \square \equiv \square - \square$

7 a) Dora and Rosie are trying to work out $9 - \frac{4}{11}$
 What mistakes have they made?

Dora

$$9 - \frac{4}{11} = \frac{5}{11}$$

Rosie

$$9 - \frac{4}{11} = \frac{99}{11} - \frac{4}{11}$$

$$\text{So } 9 - \frac{4}{11} = \frac{95}{0}$$

b) How would you calculate $9 - \frac{4}{11}$
 Compare your method with a partner's.

8 Work out the subtractions.

a) $3 - \frac{2}{5}$

c) $10 - \frac{3}{4}$

b) $8 - \frac{2}{3}$

d) $7 - \frac{10}{19}$

9 There are 6 episodes in a series.
 Brett has watched $\frac{3}{4}$ of the first episode.
 Exactly how many episodes does he need to watch to finish the series?

10 Kim orders 3 pizzas. Each pizza is sliced into 8 slices.
 Kim has 3 slices and Tom has 4
 Exactly how much pizza is left?