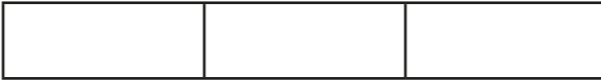# Add and subtract fractions from integers expressing the answer as a single fraction

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

$\frac{3}{4} + \frac{1}{4} =$ ☐

$\frac{2}{5} + \frac{3}{5} =$ ☐

$\frac{1}{4} + \frac{1}{4} + \frac{2}{4} =$ ☐

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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) $1 - \frac{1}{5} =$ ☐

b) $1 - \frac{2}{5} =$ ☐

c) $1 - \frac{3}{5} =$ ☐

d) $1 - \frac{4}{5} =$ ☐

e) $1 - \frac{7}{10} =$ ☐

f) $1 - \frac{9}{11} =$ ☐

g) ☐ $= 1 - \frac{11}{20}$

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) $1 + \frac{2}{5} =$ ☐

$2 + \frac{2}{5} =$ ☐

$3 + \frac{2}{5} =$ ☐

$7 + \frac{2}{5} =$ ☐

b) $15 + \frac{1}{3} =$ ☐

$15 + \frac{2}{3} =$ ☐

$15 + \frac{3}{3} =$ ☐

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)

10   11   12

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

7 **a)** Dora and Rosie are trying to work out $9 - \frac{4}{11}$

What mistakes have they made?

Dora

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

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_____

Rosie

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

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

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b) How would you calculate $9 - \frac{4}{11}$

Compare your method with a partner's.

8 Work out the subtractions.

a) $3 - \frac{2}{5} = \boxed{}$ **c)** $10 - \frac{3}{4} = \boxed{}$

b) $8 - \frac{2}{3} = \boxed{}$ **d)** $7 - \frac{10}{19} = \boxed{}$

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?

$\boxed{}$

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?

$\boxed{}$

White Rose Maths