Adding and subtracting fractions

- Adding fractions
- Subtracting fractions

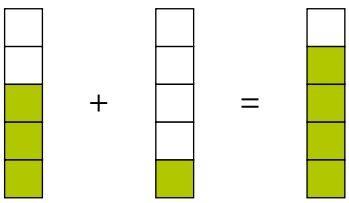
Keywords

You should know

explanation 1 online

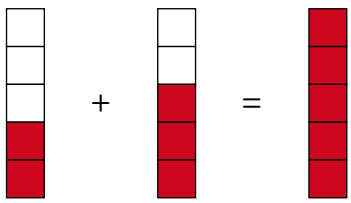
1 Copy and complete the fraction additions shown by these diagrams.

a



$\frac{\square}{5} + \frac{\square}{5} = \frac{\square}{5}$

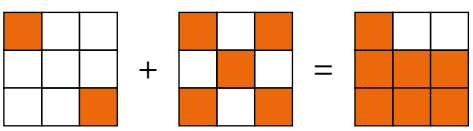
b



$\frac{\square}{5} + \frac{\square}{5} = \frac{\square}{5}$

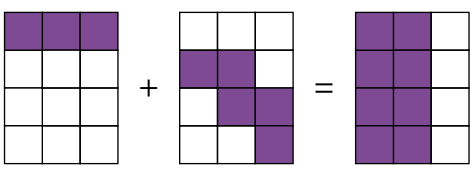
$= \square$

c



$\frac{\square}{9} + \frac{\square}{\square} = \frac{\square}{\square}$

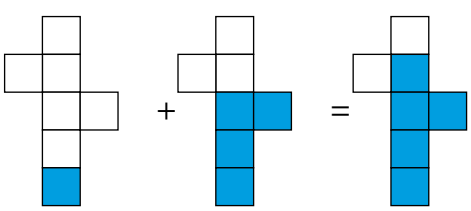
d



$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$

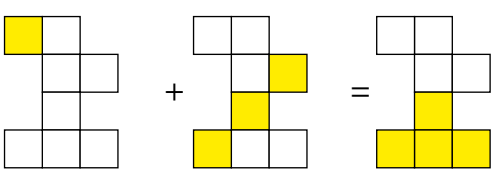
$= \frac{\square}{3}$

d



$\frac{\square}{7} + \frac{\square}{\square} = \frac{\square}{\square}$

f

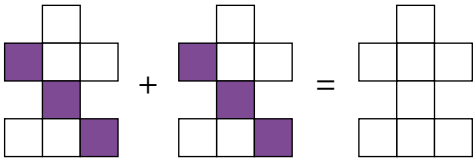


$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$

$= \frac{\square}{2}$

2 Copy and complete these diagrams and fraction calculations.

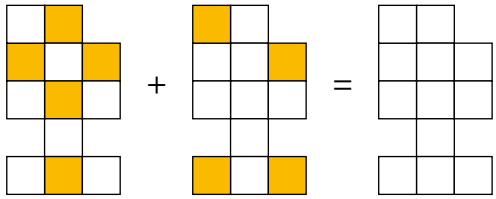
a



$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$$

$$= \frac{\square}{4}$$

b



$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$$

$$= \frac{3}{\square}$$

3 Simplify these as far as possible.

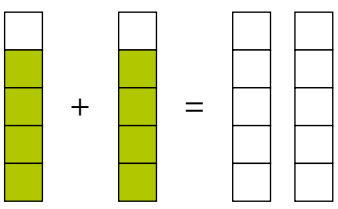
a $\frac{5}{9} + \frac{2}{9}$ **b** $\frac{7}{12} + \frac{1}{12}$ **c** $\frac{3}{10} + \frac{5}{10}$

d $\frac{7}{15} + \frac{5}{15}$ **e** $\frac{3}{16} + \frac{4}{16} + \frac{5}{16}$ **f** $\frac{2}{11} + \frac{6}{11} + \frac{3}{11}$

explanation 2 online

4 Copy and complete these diagrams and fraction calculations.

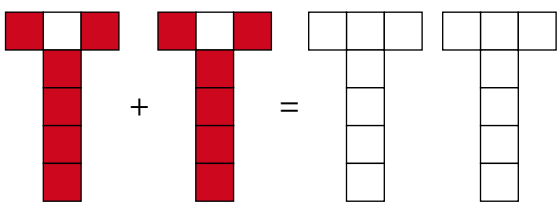
a



$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$$

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

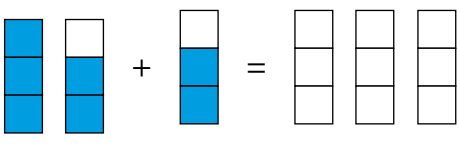
b



$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$$

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

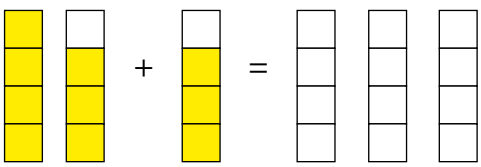
c



$$1\frac{\square}{\square} + \frac{\square}{\square} = \square\frac{\square}{\square}$$

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

d



$$1\frac{\square}{\square} + \frac{\square}{\square} = \square\frac{\square}{\square}$$

$$= \square\frac{\square}{2}$$

5 Simplify these as far as possible.

a $\frac{7}{9}+\frac{6}{9}$ **b** $\frac{9}{12}+\frac{4}{12}$ **c** $\frac{2}{7}+\frac{5}{7}$

d $\frac{7}{8}+\frac{3}{8}$ **e** $\frac{4}{6}+\frac{5}{6}$ **f** $\frac{17}{20}+\frac{8}{20}$

6 Simplify these as far as possible.

a $1\frac{2}{5}+\frac{2}{5}$ **b** $1\frac{2}{5}+\frac{4}{5}$ **c** $1\frac{5}{8}+\frac{6}{8}$

d $1\frac{11}{12}+\frac{7}{12}$ **e** $2\frac{9}{10}+\frac{5}{10}$ **f** $3\frac{5}{6}+\frac{4}{6}$

explanation 3

7 Simplify these as far as possible.

a $\frac{8}{9}-\frac{5}{9}$ **b** $\frac{10}{12}-\frac{1}{12}$ **c** $\frac{13}{15}-\frac{3}{15}$

d $1-\frac{2}{5}$ **e** $1-\frac{7}{10}$ **f** $2-\frac{3}{8}$

g $7-\frac{4}{11}$ **h** $9-\frac{3}{20}$ **i** $16-\frac{9}{25}$

8 Simplify these as far as possible.

a $1\frac{1}{3}-\frac{2}{3}$ **b** $1\frac{1}{4}-\frac{3}{4}$ **c** $2\frac{4}{9}-\frac{7}{9}$

explanation 4

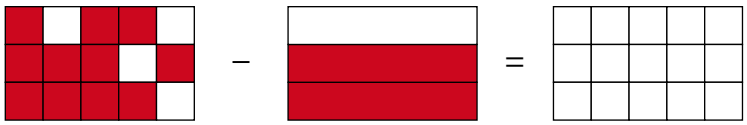
9 Copy and complete this diagram and fraction calculation.

$$\frac{\square}{5}+\frac{\square}{\square}=\frac{\square}{10}+\frac{\square}{\square}$$

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

10 Copy and complete these diagrams and fractions calculations.

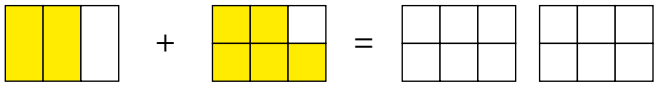
a



$$\frac{\square}{\square} - \frac{\square}{3} = \frac{\square}{\square} - \frac{\square}{\square}$$

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

b



$$\frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square} + \frac{\square}{\square}$$

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

***11** Simplify these fraction calculations as far as possible.

a $\frac{1}{2} + \frac{3}{8}$ **b** $\frac{3}{4} + \frac{7}{16}$ **c** $\frac{11}{12} - \frac{1}{6}$

d $\frac{17}{20} + \frac{4}{5}$ **e** $\frac{11}{15} - \frac{2}{3}$ **f** $\frac{9}{25} - \frac{14}{75}$

***12** Simplify these fraction calculations as far as possible.

a $\frac{9}{10} + \frac{3}{5}$ **b** $\frac{5}{6} + \frac{7}{24}$ **c** $\frac{41}{50} + \frac{6}{25}$

d $2\frac{3}{5} + \frac{1}{10}$ **e** $3\frac{7}{12} - \frac{1}{3}$ **f** $9\frac{1}{4} - \frac{5}{12}$

g $\frac{9}{10} + \frac{7}{20} + \frac{3}{5}$ **h** $\frac{2}{3} + \frac{7}{12} - \frac{1}{6}$ **i** $\frac{23}{25} - \frac{9}{50} + \frac{7}{10}$

***13** Tara spends $\frac{1}{5}$ of her pocket money on sweets and $\frac{2}{3}$ on clothes. She saves the rest.

What proportion of her pocket money does Tara save?