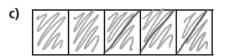# ADDING AND SUBTRACTING FRACTIONS ANSWERS

1.

a)

$$\frac{4}{5} + \frac{3}{5} = \boxed{\frac{7}{5}} = \boxed{1\frac{2}{5}}$$
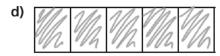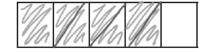
b)

$$\frac{6}{5} + \frac{3}{5} = \boxed{\frac{9}{5}} = \boxed{1\frac{4}{5}}$$

c)

$$\frac{8}{5} - \frac{6}{5} = \boxed{\frac{2}{5}}$$

d)

$$\frac{9}{5} - \frac{3}{5} = \boxed{\frac{6}{5}} = \boxed{1\frac{1}{5}}$$

2.

a) $\frac{4}{7} + \frac{2}{7} = \boxed{\frac{6}{7}}$

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

c) $\frac{4}{7} + \frac{4}{7} = \boxed{\frac{8}{7}} = \boxed{1\frac{1}{7}}$

d) $\frac{8}{7} - \frac{3}{7} = \boxed{\frac{5}{7}}$

e) $\frac{7}{9} + \frac{8}{9} = \boxed{\frac{15}{9}} = \boxed{1\frac{2}{3}}$

f) $\frac{17}{9} - \frac{8}{9} = \boxed{\frac{9}{9}} = \boxed{1}$

g) $\frac{16}{9} - \frac{8}{9} = \boxed{\frac{8}{9}}$

h) $\frac{7}{9} + \frac{2}{9} + \frac{8}{9} = \boxed{\frac{17}{9}} = \boxed{1\frac{8}{9}}$

i) $\frac{7}{15} + \frac{2}{15} + \frac{8}{15} = \boxed{\frac{17}{15}} = \boxed{1\frac{2}{15}}$

j) $\frac{7}{15} - \frac{2}{15} + \frac{8}{15} = \boxed{\frac{13}{15}}$

3.

Give six different possibilities.

e.g.

$$\frac{\boxed{1}}{8} + \frac{\boxed{12}}{8} = \frac{13}{8}$$

$$\frac{\boxed{4}}{8} + \frac{\boxed{9}}{8} = \frac{13}{8}$$

$$\frac{\boxed{2}}{8} + \frac{\boxed{11}}{8} = \frac{13}{8}$$

$$\frac{\boxed{5}}{8} + \frac{\boxed{8}}{8} = \frac{13}{8}$$

$$\frac{\boxed{3}}{8} + \frac{\boxed{10}}{8} = \frac{13}{8}$$

$$\frac{\boxed{7}}{8} + \frac{\boxed{6}}{8} = \frac{13}{8}$$

You may have got different answers

4.

a) $\dfrac{3}{8} + \dfrac{\boxed{10}}{8} = \dfrac{13}{8}$

b) $\dfrac{13}{8} - \dfrac{\boxed{6}}{8} = \dfrac{7}{8}$

c) $\dfrac{13}{8} - \dfrac{\boxed{5}}{8} = 1$

d) $\dfrac{11}{9} + \dfrac{\boxed{11}}{9} = \dfrac{22}{9} = 2\dfrac{\boxed{4}}{9}$

e) $\dfrac{11}{9} + \dfrac{\boxed{9}}{9} = \dfrac{\boxed{20}}{9} = 2\dfrac{2}{9}$

f) $\dfrac{22}{9} - \dfrac{\boxed{2}}{9} = \dfrac{\boxed{20}}{9} = 2\dfrac{2}{9}$

g) $\dfrac{4}{7} + \dfrac{\boxed{6}}{7} + \dfrac{4}{7} = 2$

h) $\dfrac{5}{7} + \dfrac{\boxed{4}}{7} + \dfrac{5}{7} = 2$

i) $\dfrac{6}{7} + \dfrac{\boxed{2}}{7} + \dfrac{6}{7} = 2$

j) $\dfrac{14}{7} + \dfrac{\boxed{3}}{7} + \dfrac{4}{7} = 3$

k) $\dfrac{15}{7} + \dfrac{\boxed{1}}{7} + \dfrac{5}{7} = 3$

i) $\dfrac{16}{7} + \dfrac{\boxed{6}}{7} + \dfrac{6}{7} = 4$

ADDING AND SUBTRACTING FRACTIONS CHALLENGE
ANSWERS

1.

Dora has $1\frac{1}{4}$ litres left.

2.

$1\frac{7}{8}$ + $\frac{1}{8}$ = 2

$\frac{13}{8}$ + $\frac{3}{8}$ = 2

$\frac{9}{8}$ + $\frac{7}{8}$ = 2

3.

Annie's rope is $1\frac{1}{4}$ m long.   Dexter's rope is 2 m long.