Add fractions

1 Complete the calculations.

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

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

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

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

Talk to your partner about the methods you used.

2 Complete the calculation that is represented.
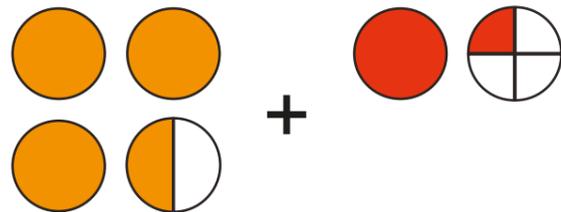
$\boxed{3\frac{1}{2}} + \boxed{1\frac{1}{4}} = \boxed{4\frac{3}{4}}$

Show the method that you used.

3 Work out the addition.

$2\frac{2}{3} + 1\frac{1}{6}$
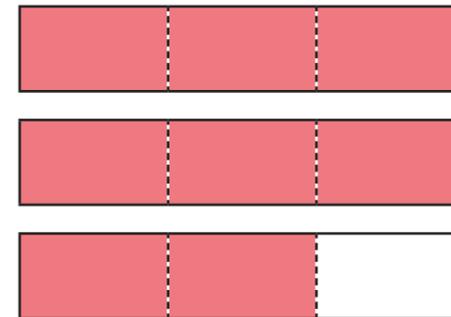
Show your method.

$\boxed{3\frac{5}{6}}$

4 Amir and Whitney are working out an addition.

$1\frac{3}{4} + 3\frac{2}{5}$
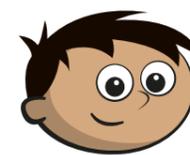
I will add the wholes and then the parts.

I will convert each number to an improper fraction first and then add them.

Complete Amir's and Whitney's methods.

| Amir's method	Whitney's method
1 + 3 = 4 wholes $\frac{3}{4} + \frac{2}{5} = \boxed{\frac{15}{20}} + \boxed{\frac{8}{20}} = \frac{23}{20} = 1\frac{3}{20}$ $4 + 1\frac{3}{20} = 5\frac{3}{20}$	$1\frac{3}{4} = \frac{7}{4}$ and $3\frac{2}{5} = \boxed{\frac{17}{5}}$ $\frac{7}{4} + \frac{17}{5} = \frac{35}{20} + \frac{68}{20} = \frac{103}{20}$ $= 5\frac{3}{20}$

5 Complete the calculations.

a) $2\frac{3}{5} + 1\frac{3}{10} = \boxed{3\frac{9}{10}}$

c) $3\frac{5}{9} + 1\frac{1}{4} = \boxed{4\frac{29}{36}}$

b) $4\frac{7}{15} + 2\frac{1}{3} = \boxed{6\frac{4}{5}}$

d) $7\frac{5}{8} + 1\frac{2}{3} = \boxed{9\frac{7}{24}}$

6 Esther cycles $2\frac{7}{10}$ km and then takes a rest.

Later, Esther cycles $3\frac{1}{4}$ km.

How far does Esther cycle in total?

$\boxed{5\frac{19}{20}\ \text{km}}$

7 Use the given fact to help you complete the calculations.

$$\frac{2}{3} + \frac{1}{5} = \frac{13}{15}$$

a) $12\frac{2}{3} + 11\frac{1}{5} = \boxed{23\frac{13}{15}}$

b) $270\frac{2}{3} + 125\frac{1}{5} = \boxed{395\frac{13}{15}}$

8 Three buckets are partly filled with water.

Each bucket can hold 10 litres in total.

$3\frac{1}{2}$ litres $2\frac{3}{4}$ litres $3\frac{4}{5}$ litres

Is it possible for all the water to fit into one bucket? ___No___

Show all your working.

$$3\tfrac{1}{2} + 2\tfrac{3}{4} + 3\tfrac{4}{5} = 10\tfrac{1}{20}$$

9 Use the digits 1 to 6 once each to complete the addition.

e.g. $8\frac{3}{20} = \boxed{1\frac{3}{4}} + \boxed{6\frac{2}{5}}$