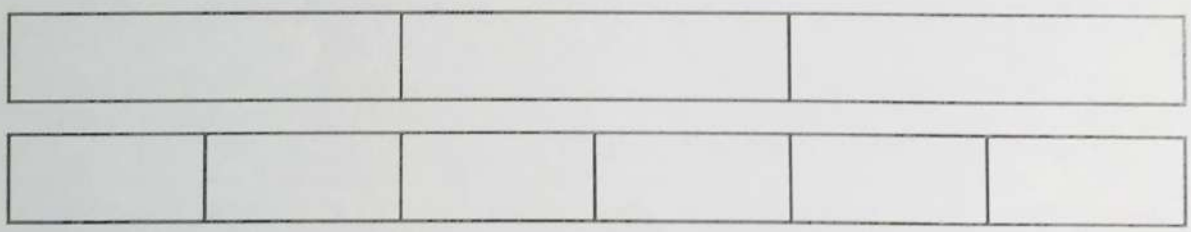
1 Complete the additions.

Use the bar models to help you.

a)

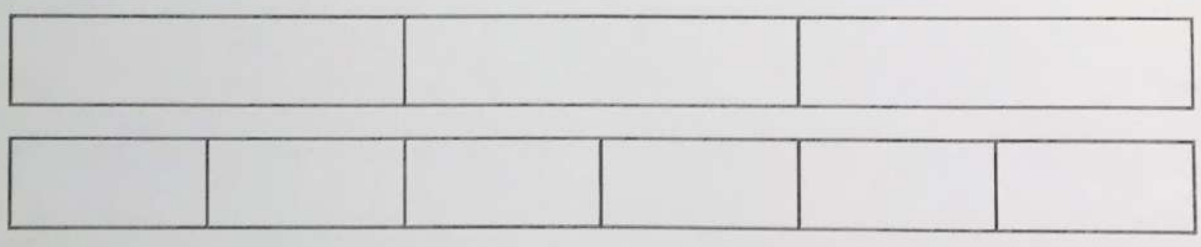
$\frac{1}{2} + \frac{1}{6} = \square$

b)



$\frac{1}{3} + \frac{1}{6} = \square$

c)

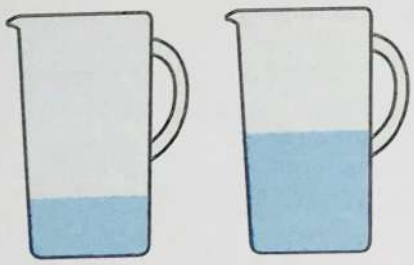


$\frac{2}{3} + \frac{1}{6} = \square$

2 Match the additions that have the same answer.

$\frac{3}{4} + \frac{1}{12}$	$\frac{10}{12} + \frac{1}{12}$
$\frac{2}{3} + \frac{1}{12}$	$\frac{6}{12} + \frac{1}{12}$
$\frac{5}{6} + \frac{1}{12}$	$\frac{9}{12} + \frac{1}{12}$
$\frac{1}{2} + \frac{1}{12}$	$\frac{8}{12} + \frac{1}{12}$

3 Here are two jugs.



One jug contains $\frac{5}{18}$ litres of water.

The other jug contains $\frac{4}{9}$ litres of water.

How many litres of water are there altogether?

There are ☐ litres of water altogether.

4 a) Complete the calculations.

$\frac{1}{5} + \frac{1}{10} = \square$

$\frac{2}{5} + \frac{1}{10} = \square$

$\frac{3}{5} + \frac{1}{10} = \square$

$\frac{4}{5} + \frac{1}{10} = \square$

$\frac{1}{16} + \frac{5}{32} = \square$

$\frac{1}{8} + \frac{5}{32} = \square$

$\frac{1}{4} + \frac{5}{32} = \square$

$\frac{1}{2} + \frac{5}{32} = \square$

b) Can you spot any patterns? Talk to a partner about it.

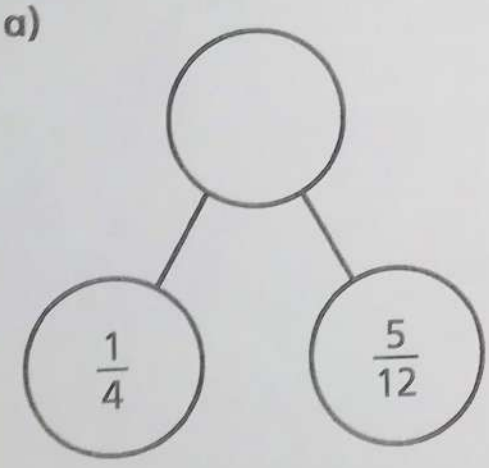
c) What calculation would come next in each set?

_____

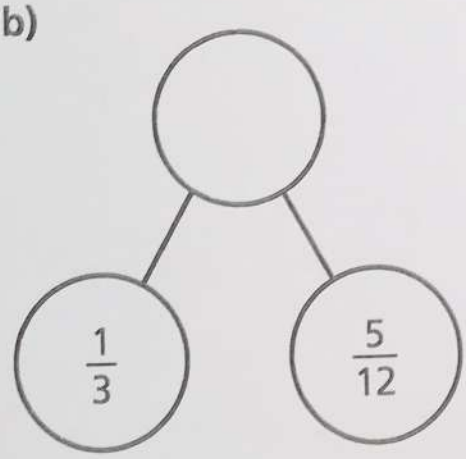
_____

5 Complete the part-whole models.

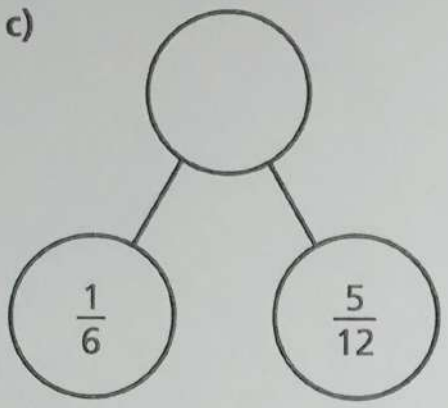
a)



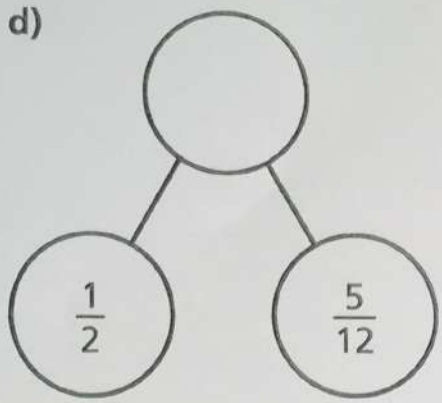
b)



c)



d)



6

$$\frac{\square}{8} + \frac{\square}{16} = \frac{7}{8}$$

What could the missing numerators be?

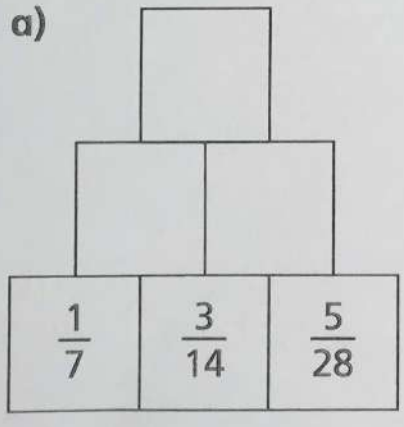
Give six different possibilities.

$$\frac{\square}{8} + \frac{\square}{16} = \frac{7}{8} \qquad \frac{\square}{8} + \frac{\square}{16} = \frac{7}{8} \qquad \frac{\square}{8} + \frac{\square}{16} = \frac{7}{8}$$

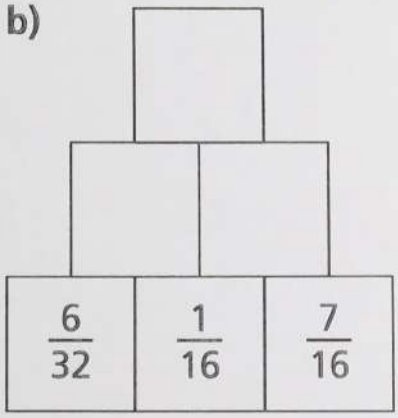
$$\frac{\square}{8} + \frac{\square}{16} = \frac{7}{8} \qquad \frac{\square}{8} + \frac{\square}{16} = \frac{7}{8} \qquad \frac{\square}{8} + \frac{\square}{16} = \frac{7}{8}$$

7 Complete the addition pyramids.

a)



b)



c) What fraction is equivalent to both of the fractions at the top of the pyramids?