

# Summer Term Maths Year 10

## Linking ratios and fractions

Day 1

Week 5

1 The ratio of a to b is 3 : 4.

Rosie says that 'a is  $\frac{3}{4}$  of b'

Jack says that 'a is  $\frac{3}{7}$  of b'

(a) Explain why Rosie is correct.

**As 3 is 3 quarters of 4**

(b) What has Jack worked out?

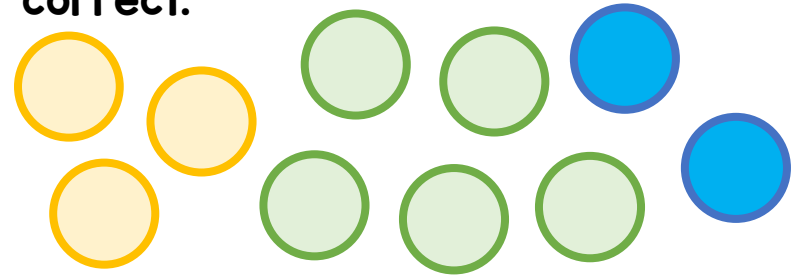
**Jack has worked out a as a fraction of the whole**

2 The ratio of c to d is 2 : 3.

(a) What fraction of d is c?  $\frac{2}{3}$

(b) What fraction of c is d?  $\frac{3}{2}$

3 Circle the statements that are correct.



(a)  $\frac{3}{10}$  of the counters are yellow

(b) The ratio of yellow to green is 5 : 3

(c) The number of yellow counters is

$\frac{3}{8}$  the number of green counters.

(d) The number of blue counters is

$\frac{2}{5}$  the number of green counters.

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4 Use the bar model to complete the statements.



(a) The ratio of orange to blue is  $\frac{3}{5}$

(b) The fraction of blue parts is  $\frac{5}{8}$

(c) Blue is  $\frac{5}{3}$  of orange.

(d) Orange is  $\frac{3}{5}$  of blue.

5 Draw a bar model to represent the statement "orange is  $\frac{4}{5}$  of blue".



6 (a) If a is  $\frac{2}{7}$  of b what fraction of a is

$$b? \frac{7}{2}$$

(b) If c is  $\frac{4}{3}$  of d what fraction of c is

$$d? \frac{3}{4}$$

7 X is  $\frac{3}{5}$  of Y and Z is  $\frac{2}{3}$  of X.

(a) Draw a diagram to represent the parts of X to Y to Z.



(b) What fraction of Z is Y?  $\frac{5}{2}$