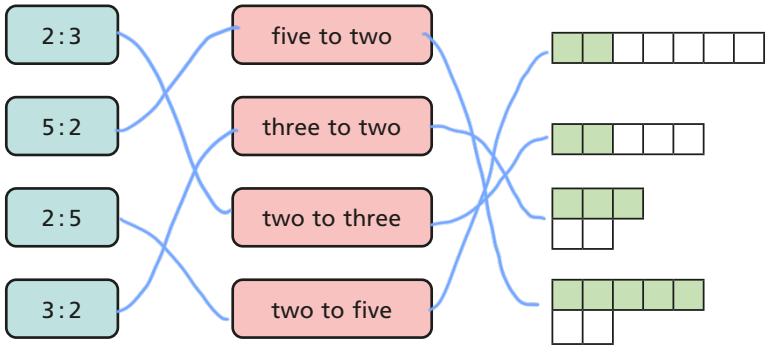
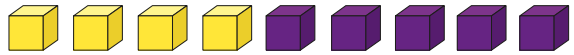
Introducing the ratio symbol

1 The ratios show shaded parts to non-shaded parts.

Match the ratios, statements and bar models.



2



The ratio of purple to yellow is 5 : 4

Mo

It is 4 : 5

Alex

Who is correct? Mo

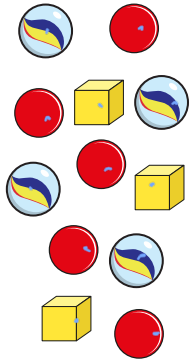
Explain your answer.

For every 5 purple cubes there are 4 yellow cubes.

3 Dani has some counters, cubes and marbles.

Complete the sentences.

4 marbles
5 counters
3 cubes



The ratio of counters to marbles is 5 : 4

The ratio of marbles to cubes is 4 : 3

The ratio of cubes to counters is 3 : 5

The ratio of counters to cubes is 5 : 3

The ratio of counters to cubes to marbles is 5 : 3 : 4

4 Brett has drawn some triangles and squares.

The ratio of triangles to squares is 1 : 3

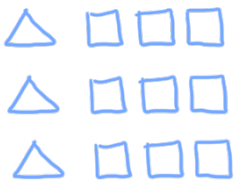
a) Are there more triangles or more squares? squares

Explain how you know.

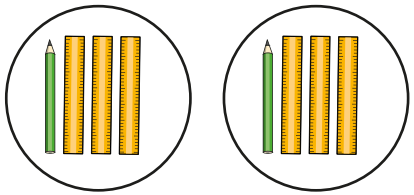
For every 1 triangle there are 3 squares.

b) Brett has drawn more than 10 shapes.

Draw what Brett might have drawn.

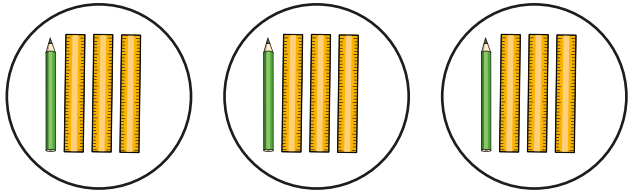


5 Here are some rulers and some pencils.



a) What is the ratio of pencils to rulers? 1 : 3

b) Here are some more rulers and pencils.



Ron

The ratio of pencils to rulers is the same as in part a).

Ron is wrong because there are more pencils and more rulers.

Dora

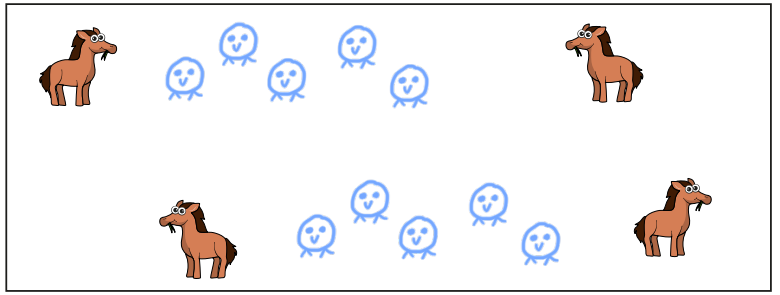
Who is correct? Ron

Explain your answer.

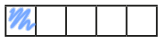
For every 1 pencil there are still 3 rulers.

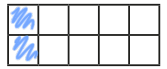
6 The ratio of horses to chickens in a field is 2 : 5

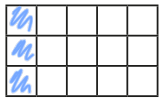
Here are the horses. Draw the chickens.



7 Shade squares so that the ratio of shaded to non-shaded squares is 1 : 4

a) 

b) 

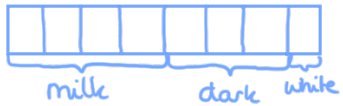
c) 

8 A box contains dark, white and milk chocolates.

$\frac{3}{8}$ of the box are dark chocolates.

$\frac{1}{2}$ of the box are milk chocolates.

The rest are white chocolates.



What does each ratio represent?

a) 1 : 3

white : dark

b) 4 : 1

milk : white

c) 3 : 5

dark : milk or white