

Week 18

Wednesday 22nd July 2020

Year 6 Calculating Ratio - Varied Fluency

Watch the demonstrations on how to calculate ratios depending on whether you're simplifying them or increasing them:

<https://www.bbc.co.uk/bitesize/topics/zsq7hyc/articles/z8kfnbk>

<https://www.youtube.com/watch?v=0Y-tmGqcAg0&feature=youtu.be>

<https://vimeo.com/432268547>

Calculating Ratio

1a. Use the image below to complete the ratio statements.



For every ___ oranges, there are ___ pears.

:

If there are 8 oranges, how many pears will there be?



6 VF

Calculating Ratio

1b. Use the image below to complete the ratio statements.



For every ___ rubbers, there is ___ pencil sharpener.

:

If there are 4 rubbers, how many pencil sharpeners will there be?



6 VF

2a. There are 40 pencils and pens in a box. For every 1 pencil, there are 3 pens. Use the bar model to help you calculate:

How many pencils altogether?

How many pens altogether?



6 VF

2b. There are 60 balls in a bag. For every 2 footballs, there are 4 tennis balls. Use the bar model to help you calculate:

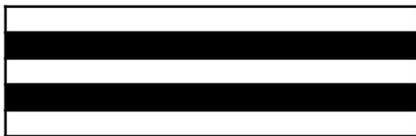
How many footballs altogether?

How many tennis balls altogether?



6 VF

3a. What is the ratio of white stripes to black stripes?



:

Use the ratio to calculate how many stripes there will be altogether if there are 6 white stripes.

white stripes

black stripes

stripes altogether



6 VF

3b. What is the ratio of lions to tigers?



:

Use the ratio to calculate how many animals there will be altogether if there are 30 lions.

lions

tigers

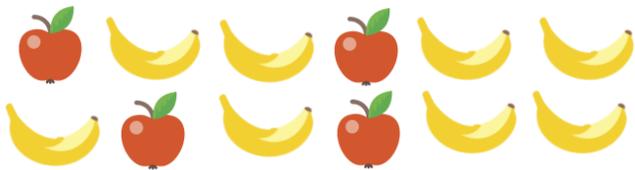
animals altogether



6 VF

Calculating Ratio

4a. Use the image below to complete the ratio statements.



For every ___ apples, there are ___ bananas.

:

If there are 12 apples, how many bananas will there be?



6 VF

Calculating Ratio

4b. Use the image below to complete the ratio statements.



For every ___ pairs of scissors, there are ___ glue pots.

:

If there are 18 pairs of scissors, how many glue pots will there be?



6 VF

5a. There are 28 pieces of fruit on a plate. For every 4 strawberries, there are 3 raspberries. Use the bar model to help you calculate:

How many strawberries altogether?

How many raspberries altogether?



6 VF

5b. There are 30 vehicles in a traffic jam. For every 3 cars, there are 2 vans. Use the bar model to help you calculate:

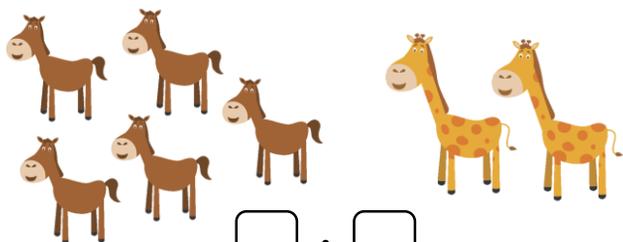
How many cars altogether?

How many vans altogether?



6 VF

6a. What is the ratio of horses to giraffes?



:

Use the ratio to calculate how many animals there will be altogether if there are 20 horses.

horses

giraffes

animals altogether



6 VF

6b. What is the ratio of golf balls to golf clubs?



:

Use the ratio to calculate how many items there will be altogether if there are 24 golf balls.

golf balls

golf clubs

items altogether



6 VF

Calculating Ratio

7a. Use the image below to complete the sentence and simplify the ratio statement.



For every ___ strawberry buns, there are ___ cherry buns and ___ raspberry buns.

: :

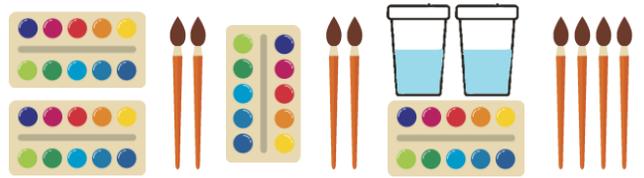
If there are 12 strawberry buns, how many cherry and raspberry buns will there be?



6 VF

Calculating Ratio

7b. Use the image below to complete the sentence and simplify the ratio statement.



For every ___ paint palettes, there are ___ paintbrushes and ___ water pots.

: :

If there are 16 paint palettes, how many paintbrushes and water pots will there be?



6 VF

8a. There are 24 goals scored during a match. For every 3 goals scored by the home team, there is 1 goal scored by the away team. Use the bar model to help you calculate:

How many home goals altogether?
How many away goals altogether?



6 VF

8b. There are 36 marbles in a bag. For every 2 large marbles, there are 4 small marbles. Use the bar model to help you calculate:

How many large marbles altogether?
How many small marbles altogether?



6 VF

9a. What is the simplified ratio of crisps to chocolate to sweets?

There are 4 bags of crisps for every 8 chocolates and 2 sweets.

: :

Use the ratio to calculate how many treats there will be altogether if there are 12 bags of crisps.

chocolates
 sweets
 treats altogether



6 VF

9b. What is the simplified ratio of red to white to blue bricks?

There are 6 red bricks for every 36 white and 18 blue bricks.

: :

Use the ratio to calculate how many bricks there will be altogether if there are 18 red bricks.

blue bricks
 white bricks
 bricks altogether



6 VF