Week 17

Wednesday 15th July 2020

Year 6 Using Ratio - Reasoning and Problem Solving

Using Ratio Language

1a. Iqra has some fruit.

She says,

> There are 2 pears for every 4 apples.

Is she correct? Explain how you know.

6   R

Using Ratio Language

1b. Emmie has some toys.

She says,

> There are 4 balls for every 3 ducks.

Is she correct? Explain how you know.

6   R

2a. Jaiden has a bag of chocolate and strawberry sweets.

There are 10 sweets altogether.

If there are 3 chocolate sweets, write a sentence to show the ratio of chocolate to strawberry sweets.

6   PS

2b. Isaac has a bag of orange and lime sweets.

There are 8 sweets altogether.

If there are 2 orange sweets, write a sentence to show the ratio of orange to lime sweets.

6   PS

3a. Max and Felix are looking at the relationship between circles and squares.

Max thinks that there are 2 circles for every 5 squares.

Felix thinks that there is 1 circle for every 5 squares.

Who is correct? Explain how you know.

6   R

3b. Lucy and Hafsa are looking at the relationship between circles and squares.

Lucy thinks that there are 3 circles for every 4 squares.

Hafsa thinks that there are 4 circles for every 3 squares.

Who is correct? Explain how you know.

6   R

4a. Pippa has a bag of balloons.

There are 3 blue balloons for every 6 green balloons.

She says,

> If there was just 1 blue balloon, there would be 4 balloons in total.

Is she correct? Explain how you know.

6 R

4b. Millie has a bag of sweets.

There are 6 pink sweets for every 8 orange sweets.

She says,

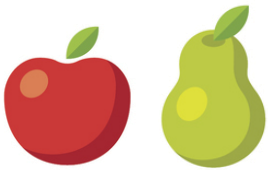> If there were 3 pink sweets, there would be 5 sweets in total.

Is she correct? Explain how you know.

6 R

5a. Jake has a bag of shopping containing apples and pears.

There are 14 pieces of fruit altogether.

Write 3 different sentences which show the possible ratios of the fruit.

6 PS

5b. Yusuf has a bag of shopping containing bananas and plums.

There are 20 pieces of fruit altogether.

Write 3 different sentences which show the possible ratios of the fruit.

6 PS

6a. Jaxon and Kai are looking at the relationship between strawberries and lemons.

Jaxon thinks that if there was 1 lemon, there would be 2 strawberries.

Kai thinks that if there was 1 strawberry, there would be 2 lemons.

Who is correct? Explain how you know.

6 R

6b. Isla and Ivy are looking at the relationship between tomatoes and chillies.

Isla thinks that if there were 3 chillies, there would be 2 tomatoes.

Ivy thinks that if there were 1 tomato, there would be 2 chillies.

Who is correct? Explain how you know.

6 R

7a. Arlo has some fruit to the ratio of 1 lemon for every 4 limes and 3 satsumas.

He says,

> If I have 12 lemons I will have 16 limes and 15 satsumas.

Is he correct? Explain how you know.

6 R

7b. Chen has some fruit to the ratio of 2 bananas for every 3 grapes and 4 apples.

He says,

> If I have 20 bananas I will have 23 grapes and 24 apples.

Is he correct? Explain how you know.

6 R

8a. Euan has some red, blue and yellow counters.

There are 4 blue counters for every red counter, and 16 counters altogether.

Write all the possible sentences to show how many of each counter Euan may have.

6 PS

8b. Toby has some red, blue and yellow counters.

There are 5 blue counters for every 2 red counters, and 25 counters altogether.

Write all the possible sentences to show how many of each counter Toby may have.

6 PS

9a. Alfie and Ethan have some blue, green and red counters. There are 5 blue counters for every green counter and 30 counters altogether.

Alfie thinks that if there were 15 blue counters, there would be 5 green counters and 10 red counters.

Ethan thinks that if there were 20 blue counters, there would be 4 green counters and 6 red counters.

Who is correct? Explain how you know.

6 R

9b. Jess and Rosie have some blue, green and red counters. There are 6 blue counters for every 4 green counters and 50 counters altogether.

Jess thinks that if there were 18 blue counters, there would be 12 green counters and 20 red counters.

Rosie thinks that if there were 24 blue counters, there would be 12 green counters and 14 red counters.

Who is correct? Explain how you know.

6 R