

Max's Market Stall: The Ratio Challenge

Learning objective: To solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.

Max the monkey is helping at a local fruit market. He has organised his produce into specific ratios to make sure every customer gets a perfect mix. Complete the ratio table below by calculating the missing quantities for each fruit bundle. Show your working out clearly.

Word bank: Ratio · Proportion · Quantity · Multiplication · Division · Equivalent

1. Max makes fruit bags with a ratio of 3 apples to 2 oranges. If a customer buys 15 apples, how many oranges must Max include to keep the ratio the same? Explain your method. (2 marks)

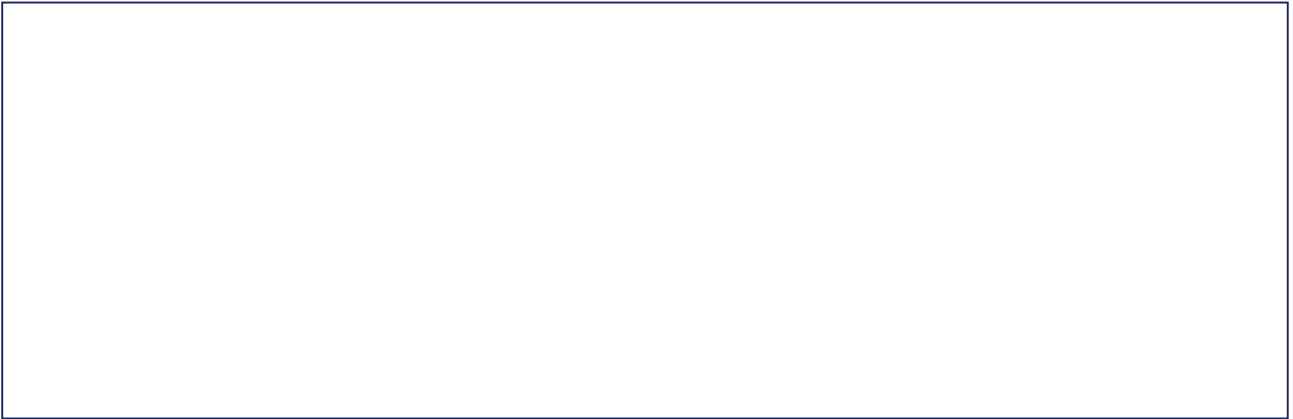
2. For every 4 punnets of strawberries, Max includes 5 bunches of grapes. If he has 20 punnets of strawberries, how many bunches of grapes does he have in total? (2 marks)

3. Max sells a 'Healthy Snack Pack' at a ratio of 6 carrot sticks to 4 celery sticks. If he uses 12 celery sticks, how many carrot sticks are needed? (2 marks)

4. A mixed fruit bowl costs £8 for 2 pineapples and 6 mangoes. If Max creates a larger bowl using the same proportion, how many mangoes would he need if he uses 5 pineapples? (Hint: Check the ratio of pineapples to mangoes first). (2 marks)

5. Max has a bag of mixed nuts with a ratio of 5 almonds to 3 walnuts. If there are 40 almonds in the bag, how many walnuts are there? (2 marks)

Draw: Draw a basket of fruit for Max that contains a ratio of 3 bananas to 4 pears. Label your drawing to show the total number of pieces of fruit.



Extension challenge: Max decides to sell a 'Mega Pack' of fruit. If the ratio of bananas to pears is 3:4, and the total number of fruits in the pack is 35, how many of each fruit are in the pack? Show your reasoning.