

Max's Market Stall: A Ratio and Proportion 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 the local community market. Use your knowledge of ratio and proportion to help him solve these maths puzzles. Remember to show your working out clearly in the boxes provided.

Word bank: ratio · proportion · multiplier · equivalent · quantity · scale · share · total

1. Max is selling bags of apples. For every 3 red apples, he puts 2 green apples in a bag. If a bag has 15 red apples, how many green apples does it have? Explain your method. (2 marks)

2. The recipe for Max's famous banana bread requires 4 bananas for every 200g of flour. How many bananas are needed if he uses 600g of flour? Show your calculation. (2 marks)

3. Max sells bunches of flowers at a ratio of 5 daisies to 3 tulips. If he has 24 flowers in total, how many are daisies and how many are tulips? Show your steps. (3 marks)

4. If 4 punnets of strawberries cost £12.00, what is the cost of 7 punnets? Show how you find the unit price first. (3 marks)

5. Max wants to double the size of his fruit display. If the original ratio of oranges to pears is 4:6, what will the new ratio be if he doubles the quantity of each fruit? (2 marks)

Extension challenge: Challenge: Create your own ratio word problem involving Max and his market stall. Swap with a partner to see if they can find the correct proportion!