

Max's Market Stall: A Fractions Adventure

Learning objective: To recognise, find, and write fractions of a discrete set of objects and apply knowledge to real-world monetary problems.

Help Max the monkey organise his fruit stall! Follow the instructions below to complete the drawing and solve the fraction puzzles. Use your ruler to ensure your shapes are clear.

Draw: Draw a rectangular market stall table. On the table, draw a collection of 12 items of fruit (use a mix of apples, pears, and oranges). Ensure the items are drawn neatly so they can be counted easily. Use a steady hand to group the items into four equal rows to represent quarters. Add a small chalkboard sign at the front of the stall that displays the total price of the fruit in Australian dollars and cents.



Label words: Numerator · Denominator · Fraction · Equivalence · Unit fraction · Total

Steps:

1. Max has 12 pieces of fruit on his stall. If $\frac{1}{4}$ of them are apples, draw the apples and calculate how many apples Max has. Show your working out.
2. If each apple costs £0.50, what is the total cost of all the apples you drew in the previous question? Justify your answer.
3. Max adds 4 pears to his stall. If he now has 16 pieces of fruit in total, explain why the value of $\frac{1}{4}$ of his

fruit collection has changed.

4. Compare and contrast a unit fraction and a non-unit fraction using the fruit on the stall as your example.
5. If Max sells $\frac{3}{8}$ of his 16 pieces of fruit, how many pieces remain on the stall? Show your calculation.
6. What might happen to the fractions if Max decided to give away half of his fruit to his friends? Explain the effect on the denominator.