

Max's Market Challenge: Mastering Long Division

Learning objective: To divide numbers up to four digits by a two-digit number using the formal written method of long division.

Max the monkey is helping the local market traders organize their stock. To help him, solve each long division puzzle below. Show your full working out for each step, including your remainders if necessary. Use the 'Bus Stop' or 'Long Division' method as preferred.

Word bank: dividend · divisor · quotient · remainder · calculation · partition

1. The greengrocer has 432 apples to be packed into boxes of 12. How many full boxes will he have? (2 marks)

2. A baker has 765 cookies to sell in bags of 15. How many bags can he fill completely? (2 marks)

3. A florist has 924 flowers. She wants to create bouquets of 22 flowers each. How many bouquets can she make? (2 marks)

4. The toy stall has 845 wooden blocks. They are sold in sets of 25. How many sets can be made, and how many blocks are left over as a remainder? (3 marks)

5. A local farmer has £1,248 to spend on new crates. If each crate costs £16, how many crates can the farmer buy? (2 marks)

Draw: Draw a picture of Max the monkey standing next to a stack of apple crates at the market, showing a small sign that explains the division sum $432 \div 12$.



Extension challenge: Max has 1,500p to spend on items that cost 30p each. Use long division to find out how many items he can buy. Explain why the remainder is zero in this calculation.