Year 6: ALGEBRA

Solve problems involving finding missing numbers using simple formulae

1) The Year 6 teacher was asking some missing number questions. He said, "A number plus **twenty seven** equals **eighty three**. What is the missing number?" What should the answer have been? Show your working.

2) Next, the teacher wrote: **n ÷ 2.9 = 9**. He asked the class to find the value of **n**. What should their answer have been?

3) One day, Winston was fitting carpets in two different rooms, each with an area of **16 m²**. The hallway's length was **8 m**. The study's width was **4 m**. Use the formula for area to find the width of the hallway and the length of the study.

4) The coordinates of one end of a straight line **[A]** are **(4, 3)**. Sophie is told that the coordinates for the other end of the line are: **x-axis = A + 3**, **y-axis = A + 0**.
What are the coordinates for the other end of the straight line?

5) Misbah was using this formula to find the missing angles in a triangle: **A + B + C = 180°**. She knew angle **A** was **50°** and angle **C** was **85°**. Use the formula to find angle **B**.

6) Next, Misbah was finding angles in a quadrilateral. She knew that the sum of all **four** angles was **360°**. Write a formula to find the angles of a quadrilateral. Use the formula to find out the missing angle in a quadrilateral where **one** angle is **95°**, **one** is **110°** and **one** is **70°**.