Constructing grids

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

1. Name the horizontal axis on a coordinate grid. [1 mark]

The horizontal number line is conventionally called x.

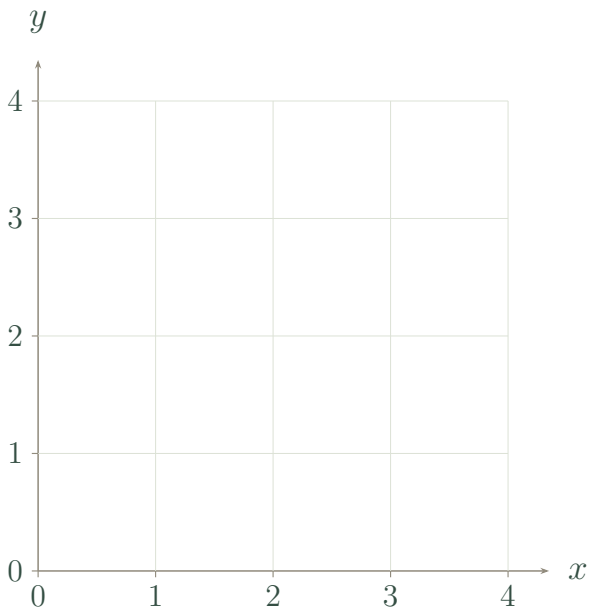
Answer: The x-axis.

2. Name the point where the axes meet. [1 mark]

Both coordinate values are zero where the axes meet.

Answer: The origin, $(0, 0)$.

3. Draw a first-quadrant grid from 0 to 4 on each axis. Use one square for one unit and label both axes. [2 marks]



Use a ruler; mark four equal steps from 0 in both directions.

Answer: x horizontal, y vertical, common origin, equal one-unit intervals labelled 0 to 4.

4. An axis is labelled 0, 2, 4, __, 8 at equally spaced marks. Fill the gap. [1 mark]

The scale increases by 2 each time.

Answer: 6

5. You have six squares across to show 12 centimetres. Choose a scale and write the seven labels, including zero. [2 marks]

$12 \div 6 = 2$; both endpoints are labelled.

Answer: 2 centimetres per square; 0, 2, 4, 6, 8, 10, 12.

6. A pupil labels consecutive equally spaced marks 0, 1, 2, 5. Explain what needs correcting. [2 marks]

The final jump is 3, unlike the earlier jumps of 1.

Answer: The labels or positions need equal numerical intervals. For one-unit steps use 0, 1, 2, 3.