Year 5 Coordinates and transformations topic test

Name: _____ Date: _____

12 questions | 21 marks | 30 minutes

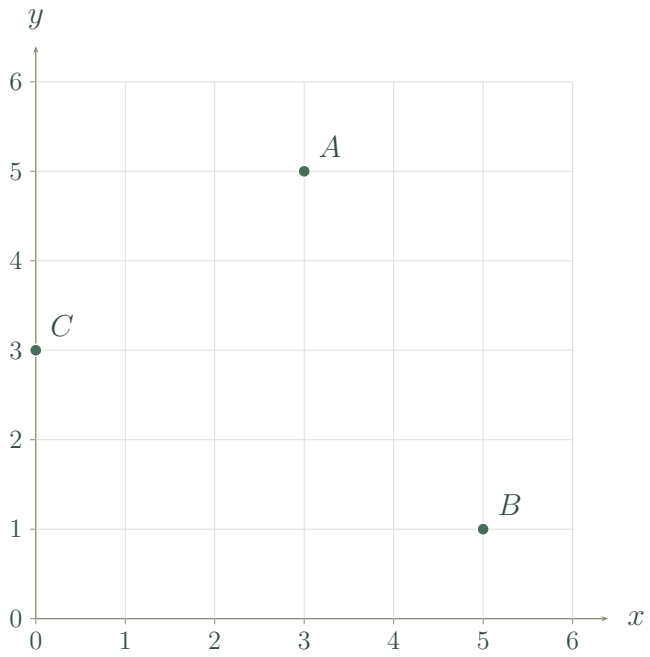
Read, plot and move points, then explain transformations and symmetry. Grids use one-unit squares unless stated otherwise.

No calculator needed.

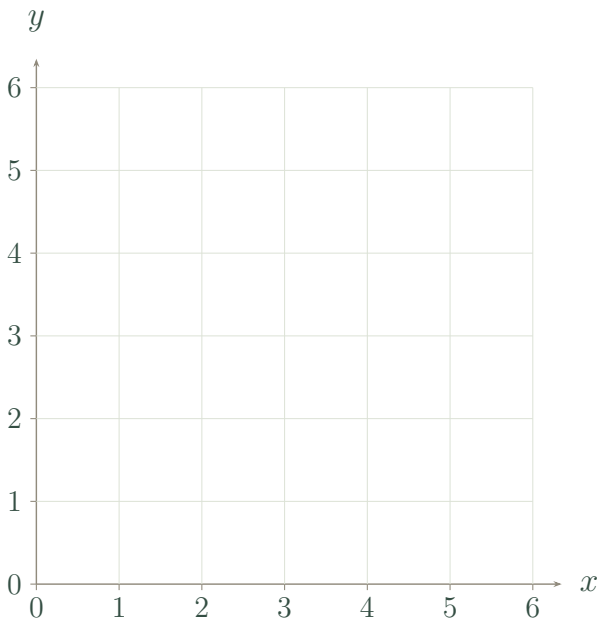
1. Name the horizontal and vertical axes. [2 marks]

2. An axis has equal intervals labelled 0, 2, 4, __, 8. Fill the gap. [1 mark]

3. Read A from the supplied grid. [1 mark]



4. Plot and label $P(4, 2)$ on the one-unit grid. [1 mark]



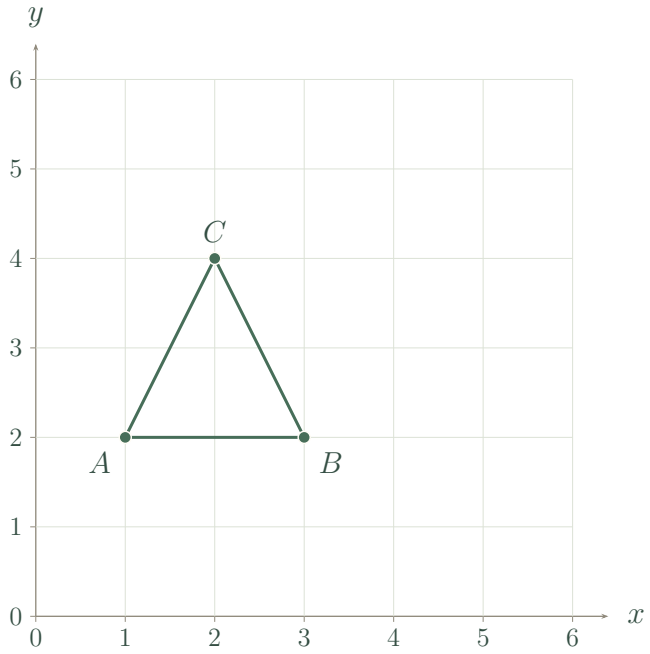
5. Which lies on the y-axis: $(3, 0)$, $(0, 3)$ or $(3, 3)$? [1 mark]

6. Start at $(2, 1)$, then move 3 right and 4 up. Find the endpoint. [2 marks]

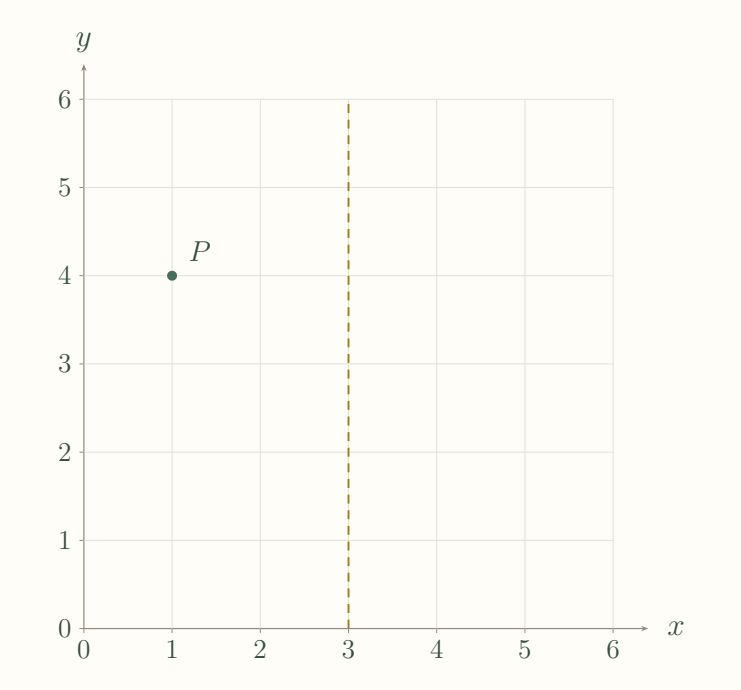
7. Give a horizontal/vertical route from $(5, 4)$ to $(1, 2)$, and its length along grid lines. [2 marks]

8. A robot finishes at $(4, 2)$ after moving left 2 and down 3. Find its start. [2 marks]

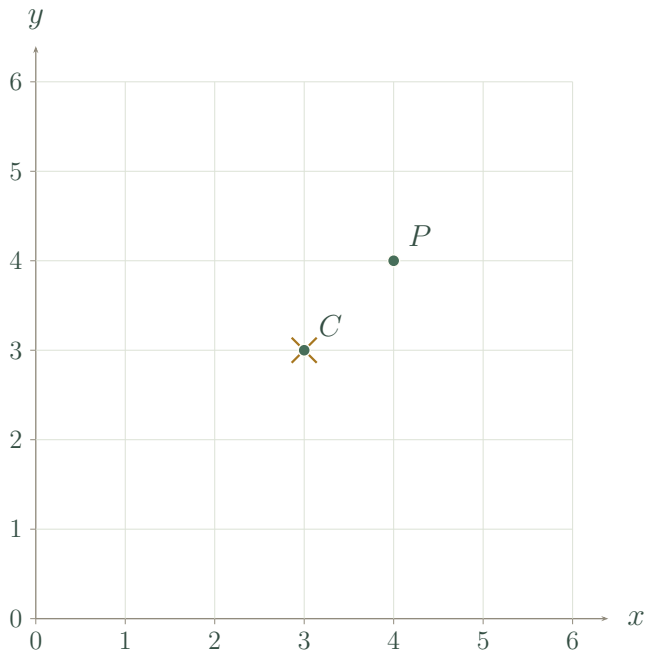
9. Translate $A(1, 2)$, $B(3, 2)$, $C(2, 4)$ by 1 right and 1 up. Give all image coordinates. [3 marks]



10. Reflect $P(1, 4)$ across $x = 3$. Find the image coordinates. [2 marks]



11. Rotate $P(4, 4)$ a half turn about $C(3, 3)$. Give its image coordinates. [2 marks]



12. A diagonal divides a non-square rectangle into equal areas. Does that make it a symmetry line? Explain. [2 marks]