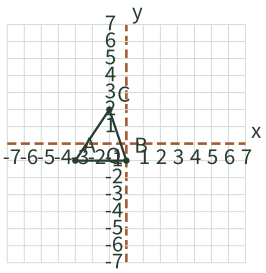
Coordinates: location and translation

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Worked example 1

Translate $A(-3,-1)$, $B(0,-1)$, $C(-1,2)$ 4 units right, then 2 units down. Give every image coordinate and plot it.

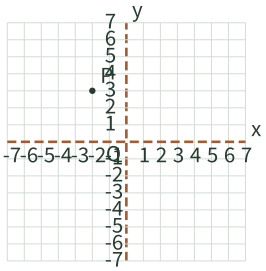


Use the labelled axes and unit grid.

Guided attempt 2

Translate $P(-2,3)$ 5 units right, then 4 units down. Give every image coordinate and plot it.

1. Horizontal coordinate: $x' = -2 + 5 = \square$.
2. Vertical coordinate: $y' = 3 - 4 = \square$.
3. Write $P' = (\square, \square)$ and plot it in the correct quadrant.



Use the labelled axes and unit grid.

Prerequisite 3

Locate $P(-3,2)$: which quadrant?

A. Quadrant III.
B. Quadrant IV.
C. Quadrant II.
D. Quadrant I.

Prerequisite 4

Locate $P(4,0)$: on which axis or at the origin?

A. On the x-axis.
B. In a quadrant.
C. No location is determined.

Coordinates: location and translation

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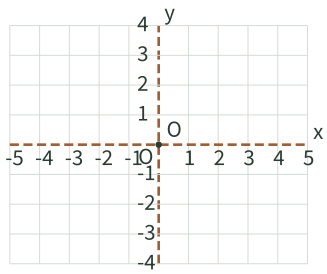
Independent practice 5

Locate $P(-4, -2)$: which quadrant?

A. Quadrant III.
B. Quadrant I.
C. Quadrant II.
D. Quadrant IV.

Independent practice 6

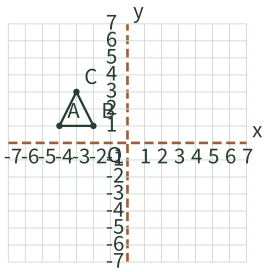
On a map, O is the school; east is positive x, north positive y, and one unit is 100 m. A library is 300 m west and 200 m north of the school. Give its coordinates.



Use the labelled axes and unit grid.

Independent practice 7

Translate $A(-4, 1)$, $B(-2, 1)$, $C(-3, 3)$ 5 units right, then 3 units down. Give every image coordinate and plot it.



Use the labelled axes and unit grid.

Independent practice 8

A(−1,2) becomes A′(3,−1). Under the same translation, find the image of B(2,4).

Exit question 9

Locate $P(0, -5)$: on which axis or at the origin?

A. In a quadrant.
B. No location is determined.
C. On the y-axis.

Exit question 10

Translate $P(2, -3)$ 4 units left, then 2 units up. Give every image coordinate and plot it.