Coordinate changes

6 questions | 11 marks

Equivalent correct methods earn the corresponding marks.

1. Move (2,−3) 1 unit left and 5 units up. [2 marks]

$2 - 1 = 1$; $-3 + 5 = 2$.

Answer: (1,2)

2. Move (−4,−1) 2 units right and 3 units up. [2 marks]

$-4 + 2 = -2$; $-1 + 3 = 2$.

Answer: (−2,2)

3. Reflect (3,−2) in the x-axis. [1 mark]

Keep x = 3 and reverse the sign of y.

Answer: (3,2)

4. Reflect (−1,4) in the y-axis. [1 mark]

Reverse the sign of x and keep y = 4.

Answer: (1,4)

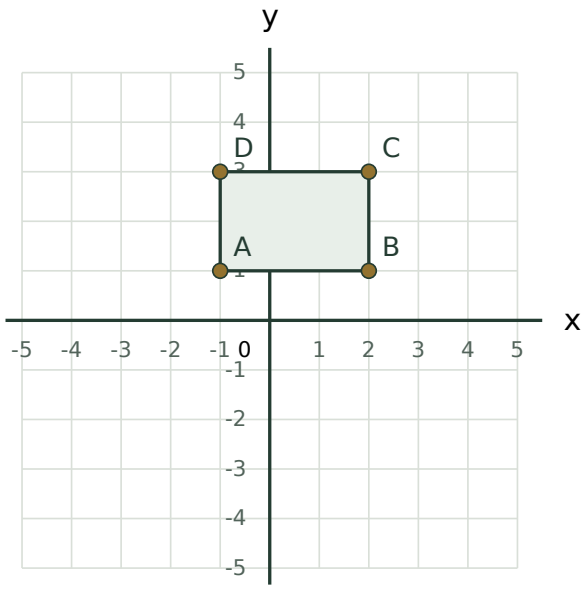
5. Describe one horizontal move and one vertical move taking A = (−3,−2) to B = (2,1). [2 marks]

Horizontal change: 2 − (−3) = 5.

Vertical change: 1 − (−2) = 3.

Answer: 5 units right and 3 units up.

6. A rectangle has vertices (−4,−1), (−1,−1), (−1,1), (−4,1). Slide it 3 units right and 2 units up. Plot the image. [3 marks]



Each grid interval is 1 unit

Add 3 to every x-coordinate.

Add 2 to every y-coordinate.

Reconnect the points in the same order.

Answer: New vertices: (−1,1), (2,1), (2,3), (−1,3).