LESSON MAKER PRO

Missing Corner Maps

Find the fourth corner of each rectangle.

GRADE 6 · 6.GM.A.25.a

6.GM.A.25.a "Determine missing vertices of a rectangle with the same x-coordinate or the same y-coordinate when graphed in the coordinate plane."

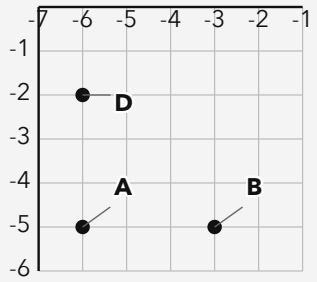
NAME _____ DATE _____

MATCH THE COORDINATES

For a rectangle whose sides follow the grid lines, corners on a vertical side have the same x-coordinate. Corners on a horizontal side have the same y-coordinate.

WORKED EXAMPLE

A, B, C, and D are corners of a rectangle in order. Find C.



1. B and C share x = -3.
2. D and C share y = -2.

Answer: C = (-3, -2)

PRACTICE 4 problems

1 Rectangle ABCD has A = (1, 1), B = (5, 1), and D = (1, 4). Find C.

ANSWER _____

2 Rectangle ABCD has A = (2, 2), B = (7, 2), and C = (7, 6). Find D.

ANSWER _____

3 Rectangle ABCD has A = (-8, 0), B = (-4, 0), and D = (-8, 3). Find C.

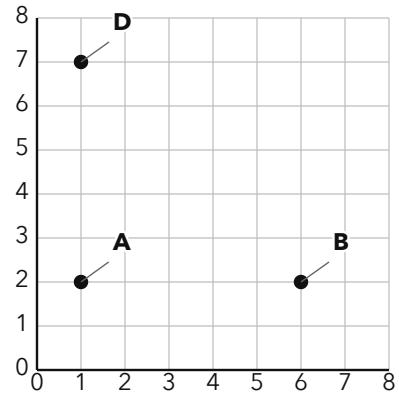
ANSWER _____

4 Rectangle ABCD has A = (-9, 1), B = (-7, 1), and C = (-7, 5). Find D.

ANSWER _____

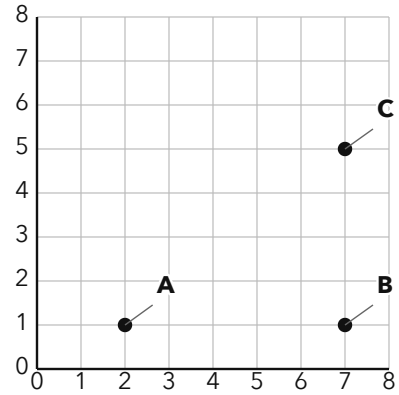
APPLY IT Show your work

1 A student designs a rectangular sticker for a game controller. Find the missing corner C on the design grid.



ANSWER _____

2 A skate park designer plots three corners of a rectangular ramp base. Find corner D.



ANSWER _____

CHALLENGE One step up

Rectangle ABCD has A = (-8, 1), B = (4, 1), and C = (4, 8). Find D and explain your reasoning.

WORK SPACE AND ANSWER

ANSWER KEY

Missing Corner Maps

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Rectangle ABCD has A = (1, 1), B = (5, 1), and D = (1, 4). Find C.	**C = (5, 4)**
2	Rectangle ABCD has A = (2, 2), B = (7, 2), and C = (7, 6). Find D.	**D = (2, 6)**
3	Rectangle ABCD has A = (-8, 0), B = (-4, 0), and D = (-8, 3). Find C.	**C = (-4, 3)**
4	Rectangle ABCD has A = (-9, 1), B = (-7, 1), and C = (-7, 5). Find D.	**D = (-9, 5)**

PART 2 · APPLY IT

1. **C = (6, 7)** C shares x = 6 with B and y = 7 with D.
2. **D = (2, 5)** D shares x = 2 with A and y = 5 with C.

CHALLENGE

D = (-8, 8). D shares x = -8 with A and y = 8 with C.

Accept coordinates with or without the vertex letter. For the challenge, accept any explanation that correctly matches the x- and y-coordinates of adjacent corners.