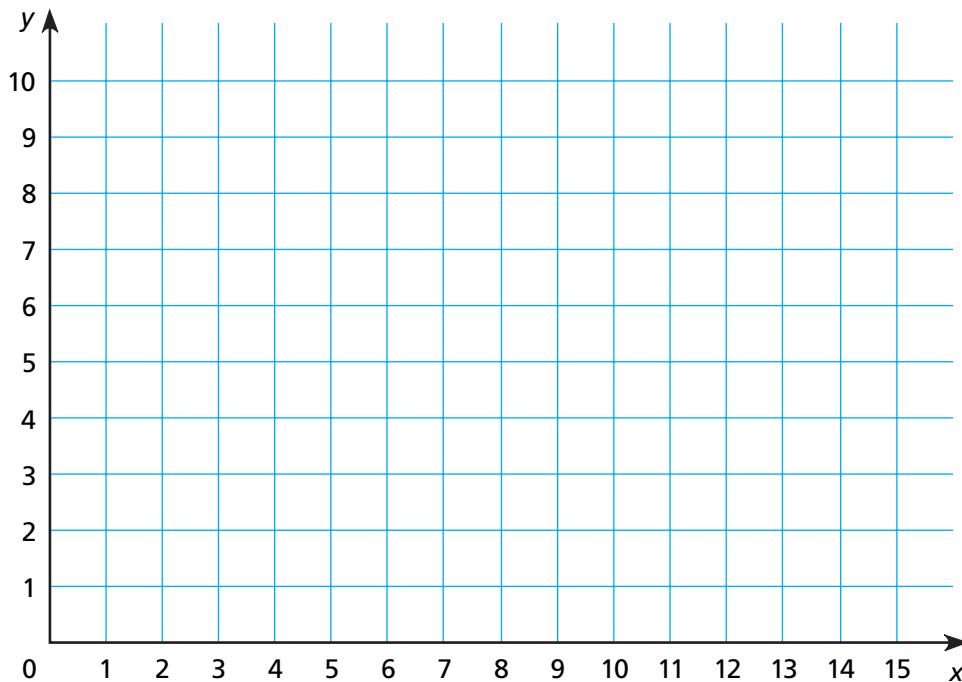


Making Figures on a Coordinate Grid

NCTM Standards 2, 3, 7, 9, 10

- 1 Plot each point, label it, and then connect $A \rightarrow B \rightarrow C \rightarrow D \rightarrow A$.

Name	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Coordinates	(1,1)	(2,5)	(3,3)	(5,2)



- 2 Complete the table using the rule given.

Name	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
Coordinates (x,y)	(1,1)	(2,5)	(3,3)	(5,2)
New Ordered Pairs: Double Each Coordinate ($2x,2y$)				

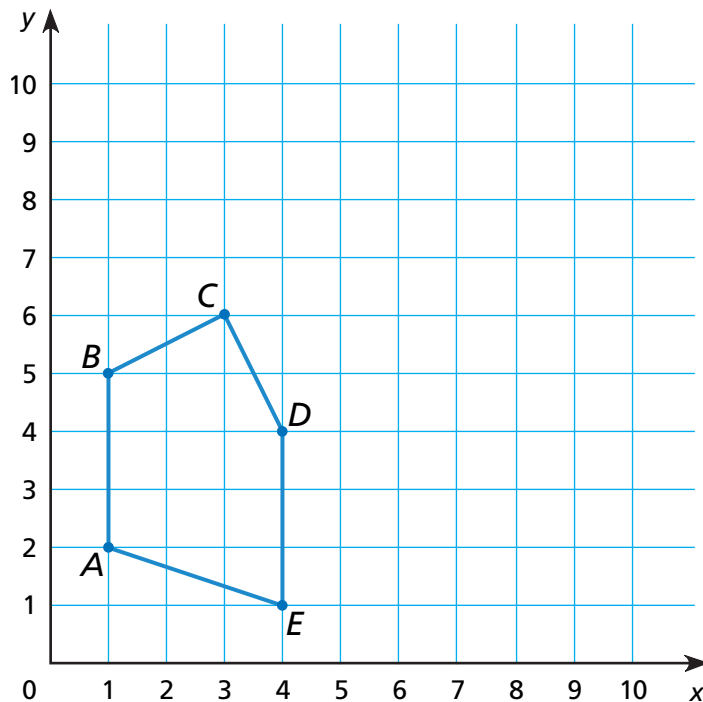
- 3 Plot the points that have the new coordinates. Connect the new points the same way: $A \rightarrow B \rightarrow C \rightarrow D \rightarrow A$.

For 4 and 5, use the grid.

- 4** Use the table to record the coordinates of the vertices of the figure shown on the grid. Then follow the rule to produce five new ordered pairs.

Name	A	B	C	D	E
Coordinates (x,y)					
New Ordered Pairs: Add 4 to each coordinate (x + 4, y + 4)					

- 5** Plot the points for the new coordinates. Connect the points in the same way the original points were connected.



- 6 Challenge** Find a rule and complete the table. Then write the rule using shorthand notation.

Original Ordered Pairs (x,y)	(4,4)	(4,7)	(6,8)	(6,6)	(5,6)	(5,7)
New Ordered Pairs	(6,1)	(6,4)	(8,5)	(8,3)		

Rule: _____, _____