11

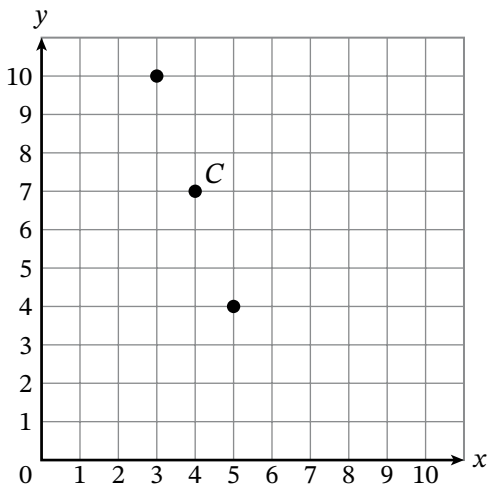
Name

Date

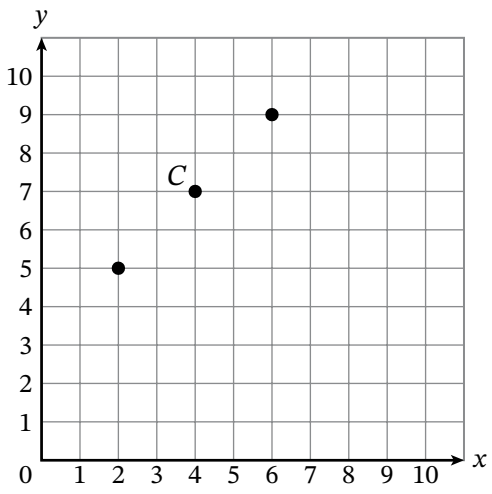
1. Use the graphs to complete parts (a)–(d).

   Use a straightedge to draw a line through the points in each coordinate plane in parts (a) and (b).

   a.

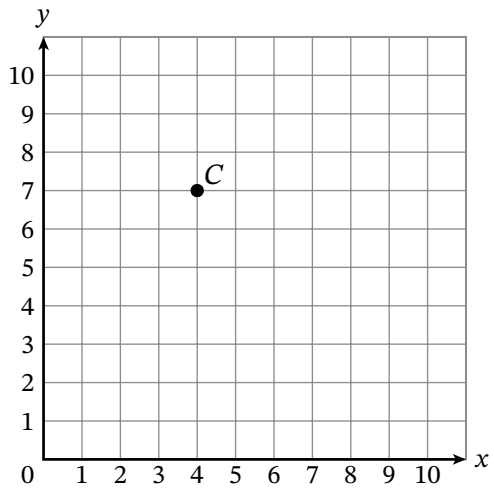


   b.

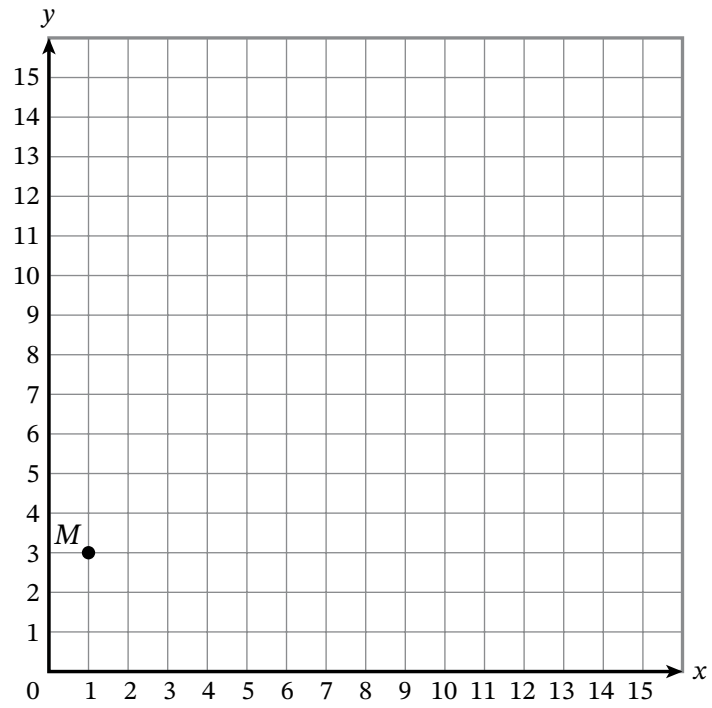


c. In both graphs, point C is located at (_____ , _____).

d. Draw a line through point C that is different from the lines shown in parts (a) and (b).



2. Use the graph of point M to complete parts (a)–(d).



a. Point M is located at (1, 3). One possible relationship between the x- and y-coordinates of this point is that the y-coordinate is 2 more than the corresponding x-coordinate.

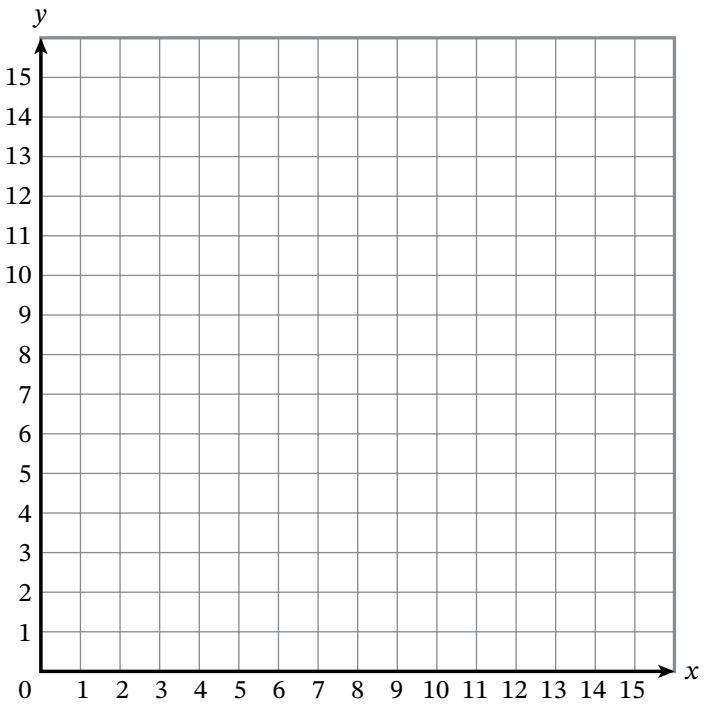
   Write three more ordered pairs with this relationship between the x- and y-coordinates.

b. Plot the points from part (a). Use a straightedge to draw a line through the points.

c. Consider another line that passes through point M. Write a relationship between the x- and y-coordinates of points that are on the new line.

d. Write three more ordered pairs with the relationship you wrote in part (c). Plot these points. Use a straightedge to draw a line through the points.

3. Use the coordinate plane to complete parts (a)–(d).



a. Plot points (1, 3) and (5, 15). Use a straightedge to draw a line through the points.

b. Each y-coordinate is 3 times as much as the corresponding x-coordinate for all points that lie on the line. Name two other points on the line.

c. Does the point $\left(\frac{2}{3}, 2\right)$ lie on the line? How do you know?

d. Sort the following ordered pairs by writing them in the correct column of the table.

$(3, 12)$ $(5, 15)$ $(9, 27)$ $(3, 0)$ $(9, 3)$ $\left(1\frac{1}{3}, 4\right)$ $(1, 3)$ $(0, 3)$ $(7, 21)$

Points on the Line	**Points Not on the Line**