



Name \_\_\_\_\_

Date \_\_\_\_\_

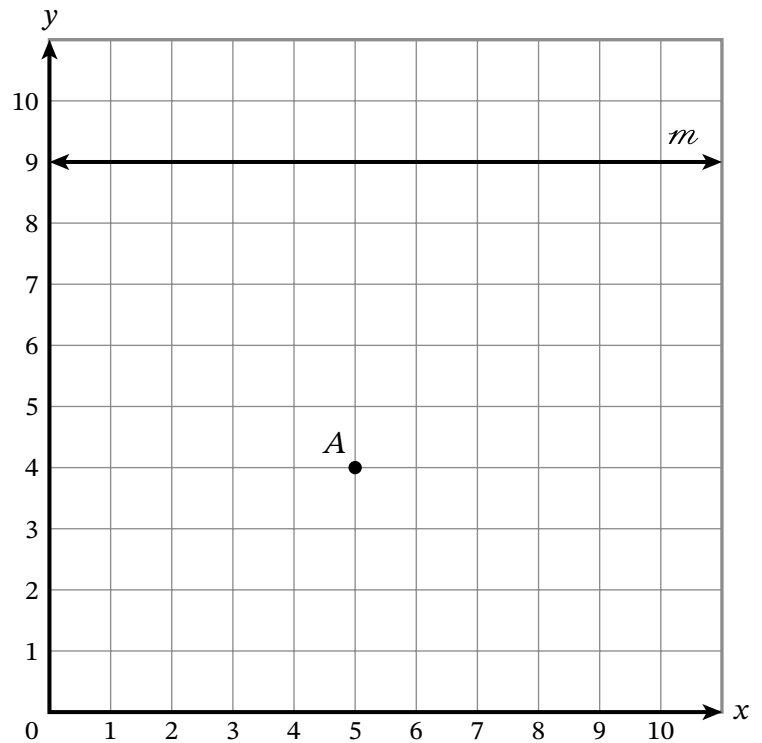
1. Use the graph to complete parts (a)–(d).

a. Draw a vertical line through point  $A$ .

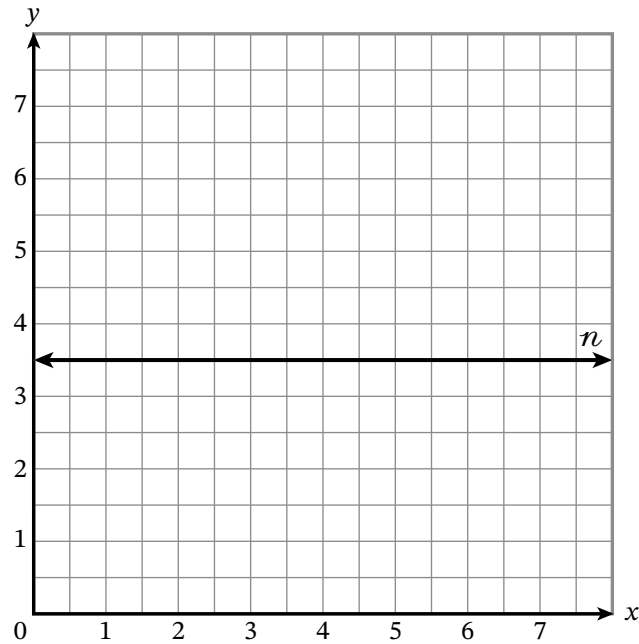
b. Plot a point on the vertical line that is 2 units farther from the  $x$ -axis than point  $A$ . Label this point  $B$  and write the ordered pair next to it.

c. Is  $\overleftrightarrow{AB}$  parallel or perpendicular to the  $y$ -axis?

d. Is  $\overleftrightarrow{AB}$  parallel or perpendicular to line  $m$ ?



2. Use the graph of line  $n$  to complete parts (a)–(b).



- a. Lightly shade the region of the plane where points are less than  $3\frac{1}{2}$  units from the  $x$ -axis.
- b. Noah says that the point  $\left(3\frac{1}{4}, 2\frac{3}{4}\right)$  is located in the shaded region because the  $y$ -coordinate is less than  $3\frac{1}{2}$ . Is Noah correct? Explain.