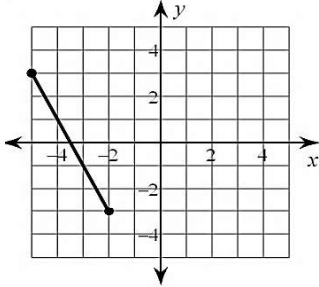


Name:

Class:

Topic:

Date:

Main Ideas/Questions	Notes
Distance Formula	Used to find the distance between two points (x_1, y_1) and (x_2, y_2)
	Formula:
Examples	1. Find the distance between the two points on the graph. 
	2. Find AB given $A(-4, 1)$ and $B(3, -1)$.
	3. Find EF given $E(-7, -2)$ and $F(11, 3)$
Midpoint Formula	Used to find the midpoint between two points (x_1, y_1) and (x_2, y_2)
	Formula:
	4. Find the midpoint of \overline{GH} given $G(7, -5)$ and $H(9, -1)$.
5. Find the midpoint of \overline{AB} given $A(-7, 4)$ and $B(3, -4)$.	

Finding a Missing Endpoint

6. Find the coordinates of A if $M(-1, 2)$ is the midpoint of \overline{AB} and B has coordinates of $(3, -5)$.
7. Find the coordinates of J if $K(-5, 10)$ is the midpoint of \overline{JL} and L has coordinates of $(-8, 6)$.
8. Find the coordinates of R if $Q(-1, 3)$ is the midpoint of \overline{PR} and P has coordinates of $(5, 6)$.

More Practice with Algebra

9. If P is the midpoint of \overline{XY} , $XP = 8x - 2$, and $PY = 12x - 30$, find the value of x .
10. If G is the midpoint of \overline{FH} , $FG = 14x + 25$, and $GH = 73 - 2x$, find FH .
11. Using the diagram to the left, if line n bisects \overline{QR} , find QP .

