

## Assignment

**Find the midpoint of the line segment with the given endpoints.**

1)  $(10, -7), (2, 1)$

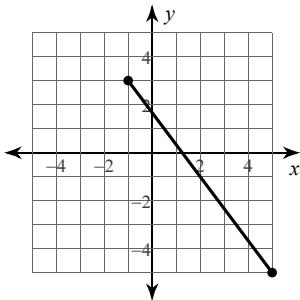
2)  $(-9, -2), (-4, -9)$

$(6, -3)$

$\left(-6\frac{1}{2}, -5\frac{1}{2}\right)$

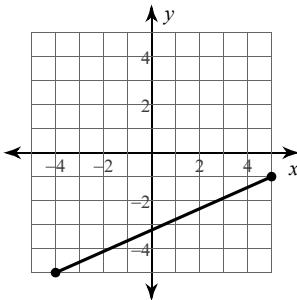
**Find the midpoint of each line segment.**

3)



$(2, -1)$

4)



$\left(\frac{1}{2}, -3\right)$

**Find the other endpoint of the line segment with the given endpoint and midpoint.**

5) Endpoint:  $(-9, 10)$ , midpoint:  $(3, 10)$

6) Endpoint:  $(1, -7)$ , midpoint:  $(3, -7)$

$(15, 10)$

$(5, -7)$

**Find the distance between each pair of points. Leave your answers in simplest radical form.**

7)  $(-5, 2), (0, -1)$

8)  $(-7, 5), (3, 3)$

$\sqrt{34}$

$2\sqrt{26}$

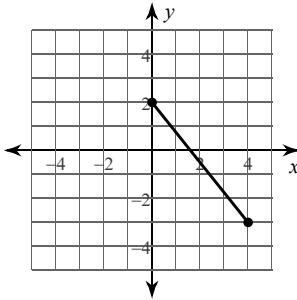
9)  $(-2, 6), (-2, -7)$

10)  $(2, 7), (-5, 2)$

$13$

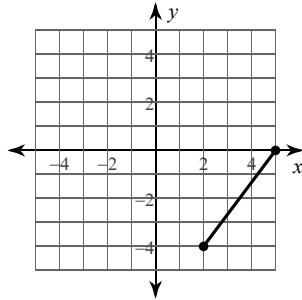
$\sqrt{74}$

11)



$\sqrt{41}$

12)



$5$