Geometry

Name_____ ID: 1

## Midpoint and Slope

Date_____ Period____

**Find the midpoint of the line segment with the given endpoints. Answers can be written as decimals or fractions when needed.**

1) $(5, -3)$, $(8, 5)$

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

2) $(-4, 5)$, $(-8, 1)$

$(-6, 3)$

3) $(4, 0)$, $(-3, 10)$

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

4) $(-3, -7)$, $(10, 10)$

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

5) $(4, -4)$, $(1, 2)$

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

6) $(-4, 1)$, $(9, 8)$

$\left(2\frac{1}{2}, 4\frac{1}{2}\right)$

**Find the other endpoint of the line segment with the given endpoint and midpoint. HINT: The midpoint is the middle number between the endpoint and what other number?**

7) Endpoint: $(-9, 2)$, midpoint: $(-10, -9)$

$(-11, -20)$

8) Endpoint: $(7, 10)$, midpoint: $(2, 6)$

$(-3, 2)$

9) Endpoint: $(9, -4)$, midpoint: $(5, 8)$

$(1, 20)$

10) Endpoint: $(-10, 9)$, midpoint: $(5, -1)$

$(20, -11)$

**Find the slope of the line through each pair of points. The answer should ALWAYS be left as a fraction or whole number.**

11) $(5, 20), (-12, 19)$

$\frac{1}{17}$

12) $(17, -17), (11, 13)$

$-5$

13) $(-2, 4), (5, 1)$

$-\frac{3}{7}$

14) $(3, 12), (9, -8)$

$-\frac{10}{3}$

15) $(6, 3), (-10, -19)$

$\frac{11}{8}$

16) $(-13, -1), (11, -13)$

$-\frac{1}{2}$