**The Midpoint Formula**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* The Midpoint Formula:
* The midpoint is the point that \_\_\_\_\_\_\_\_\_\_\_ a segment. A segment is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when it is cut into two equal halves.

Examples:

Find the midpoint between the following points.

1. (5,1) and (-5,2)
2. (-2,-6) and (1,2)
3. (-4, 8) and (-3,-10)

Find the endpoint of a segment when given one endpoint and the midpoint.

1. Endpoint (6,2) and midpoint (-2,5)
2. Endpoint (11, 15) and midpoint (3, 8)
3. Endpoint (-7, 2) and midpoint (1, 1)

Independent Practice

Find the midpoint between the following points.

1. (2,5) and (7,-3)
2. (7, -2) and (5, 5)
3. (-3, -1) and (8, -2)

Find the endpoint of a segment when given one endpoint and the midpoint.

1. Endpoint (7,5) and midpoint (3,8)
2. Endpoint (10, -2) and midpoint (-2, -3)
3. Endpoint (7, 1) and midpoint (-4, 5)