Midpoint Practice Worksheet

Name: _____ Class Period:_____
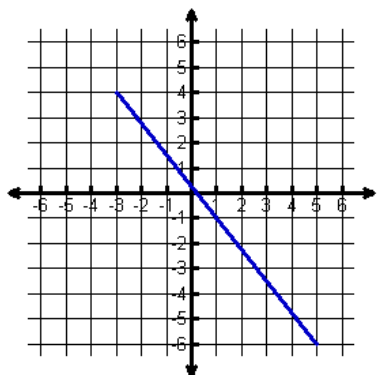
Midpoint Formula:

When given (x_1, y_1) and (x_2, y_2) the midpoint $= \left(\dfrac{x_1 + x_2}{2}, \dfrac{y_1 + y_2}{2} \right)$
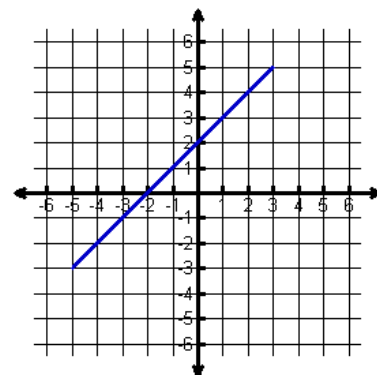
Find the midpoint of each segment.
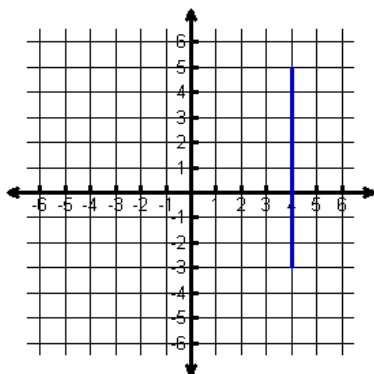
1.   (___, ___) and (___, ___)
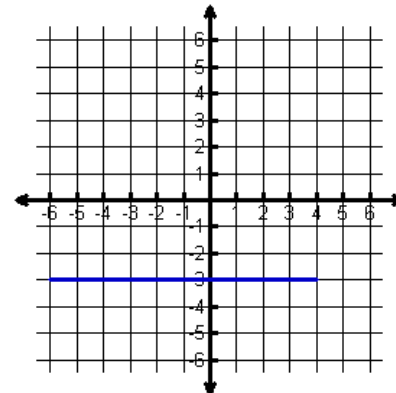
Midpoint =

2. (___, ___) and (___, ___)

Midpoint =

3. (___, ___) and (___, ___)

Midpoint =

4. (___, ___) and (___, ___)

Midpoint =

Find the midpoint of the segment with the following endpoints.

5. $(9,8)$ and $(-7,16)$

6. $(11,-3)$ and $(-15,17)$

7. $\left(\dfrac{1}{2}, -2 \right)$ and $\left(\dfrac{5}{2}, 0 \right)$

Given the midpoint and one endpoint, find the other endpoint of the line segment.
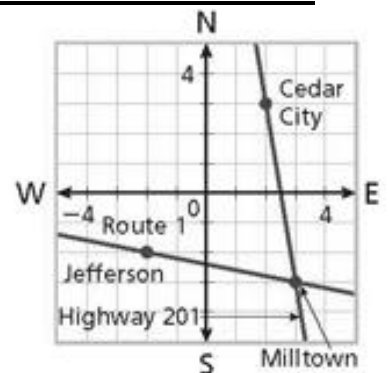
8. Midpoint: $(-4,6)$
   ENDPOINT: $(2,1)$

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9. Midpoint: $(-3,3)$
   ENDPOINT: $(-4,-2)$

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10. Midpoint: $\left(\dfrac{3}{2},1\right)$
    ENDPOINT: $(5,-7)$

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11. If each unit represent 1 mile, how far is it from Cedar City to Milltown along Highway 201?

12. A car breaks down on Route 1 halfway between Jefferson and Milltown. What would be the coordinates that the car broke down?

13. A tow truck truck is sent from Jefferson. How far does the truck need to travel to reach the car if each unit represents 1 mile?

14. If a boat is located in between 2 bouys in a bay. One bouy is located at (1,5) and the other at (3,6). What is the location of the ship?

15. Using the information from above, If each unit on the map represents 1 kilometer. What is the distance to the nearest bouy and which bouy is closer?