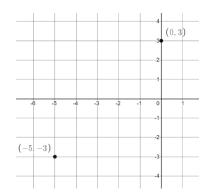
## Math 1

Unit 8 Lesson 2: Yard Work in Segments

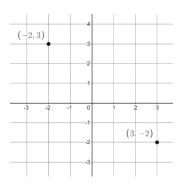
**Learning Goal(s):** I can Examine strategies for finding the midpoint of a segment, leading to a formalization of the midpoint rule; extend the strategies for finding the midpoint to create a strategy for finding the point on a line segment that partitions the segment in a given ratio.

<u>Directions</u>: Find the midpoint between the two given points.

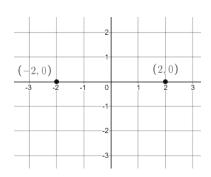
1.



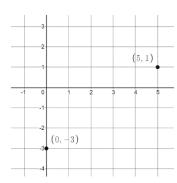
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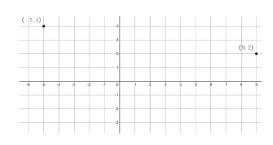
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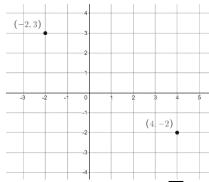
4.



5.



6.



7. Find the midpoint of line segment  $\overline{AB}$  if point A is at (3, 9) and point B is at (8, 2).

8. Find the midpoint of line segment  $\overline{JK}$  if point J is at (-2, -6) and point K is at (5, 7).

9. Find the midpoint of line segment  $\overline{XY}$  is point X is at (1, 2) and point Y is at (4, 3).

10. Find the midpoint of line segment  $\overline{GH}$  is point G is at (-3, -9) and point H is at (-4, -2).

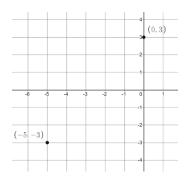
## Math 1 - KEY

Unit 8 Lesson 2: Yard Work in Segments

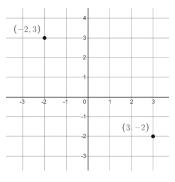
**Learning Goal(s):** I can Examine strategies for finding the midpoint of a segment, leading to a formalization of the midpoint rule; extend the strategies for finding the midpoint to create a strategy for finding the point on a line segment that partitions the segment in a given ratio.

<u>Directions</u>: Find the midpoint between the two given points.

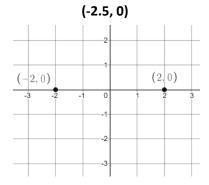
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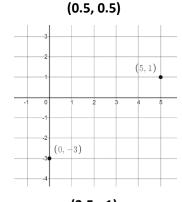
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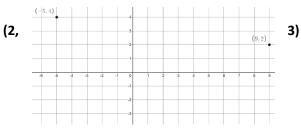
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4.

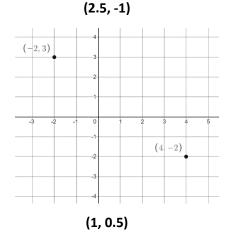


5.



(0, 0)

6.



7. Find the midpoint of line segment  $\overline{AB}$  if point A is at (3, 9) and point B is at (8, 2).

(5.5, 5.5)

9. Find the midpoint of line segment  $\overline{XY}$  is point X is at (1, 2) and point Y is at (4, 3).

(2.5, 2.5)

8. Find the midpoint of line segment JK if point J is at (-2, -6) and point K is at (5, 7).

(1.5, 0.5)

10. Find the midpoint of line segment  $\overline{GH}$  is point G is at (-3, -9) and point H is at (-4, -2).

(-3.5, -5.5)