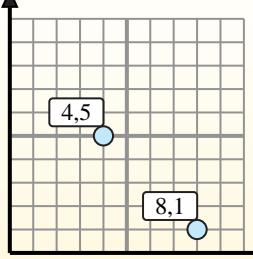




Finding Midpoint Based on Coordinates

Name: _____

Find the midpoint of the set of coordinates.



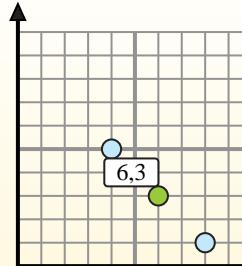
Midpoint Formula

$$\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}$$

To find the midpoint of the coordinates (4,5) and (8,1), plug the values into the midpoint formula.

$$\frac{4 + 8}{2}, \frac{5 + 1}{2}$$

The midpoint is at (6,3).



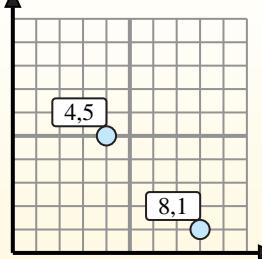
Answers

- 1) (4, 6) & (5, 4)
- 2) (8, 4) & (10, 10)
- 3) (6, 10) & (0, 0)
- 4) (0, 6) & (1, 10)
- 5) (0, 5) & (6, 2)
- 6) (3, 5) & (8, 1)
- 7) (2, 1) & (3, 7)
- 8) (9, 4) & (9, 4)
- 9) (1, 1) & (9, 10)
- 10) (3, 3) & (0, 6)
- 11) (0, 0) & (0, 0)
- 12) (0, 8) & (10, 7)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____



Find the midpoint of the set of coordinates.

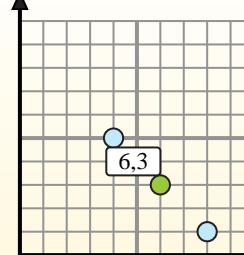
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The midpoint is at (6,3).

**Answers**

1. (4.5 , 5)
2. (9 , 7)
3. (3 , 5)
4. (0.5 , 8)

5. (3 , 3.5)6. (5.5 , 3)7. (2.5 , 4)8. (9 , 4)9. (5 , 5.5)10. (1.5 , 4.5)11. (0 , 0)12. (5 , 7.5)

1) $(4, 6) \& (5, 4)$ $\left(\frac{4+5}{2}, \frac{6+4}{2} \right) = (4.5, 5)$

2) $(8, 4) \& (10, 10)$ $\left(\frac{8+10}{2}, \frac{4+10}{2} \right) = (9, 7)$

3) $(6, 10) \& (0, 0)$ $\left(\frac{6+0}{2}, \frac{10+0}{2} \right) = (3, 5)$

4) $(0, 6) \& (1, 10)$ $\left(\frac{0+1}{2}, \frac{6+10}{2} \right) = (0.5, 8)$

5) $(0, 5) \& (6, 2)$ $\left(\frac{0+6}{2}, \frac{5+2}{2} \right) = (3, 3.5)$

6) $(3, 5) \& (8, 1)$ $\left(\frac{3+8}{2}, \frac{5+1}{2} \right) = (5.5, 3)$

7) $(2, 1) \& (3, 7)$ $\left(\frac{2+3}{2}, \frac{1+7}{2} \right) = (2.5, 4)$

8) $(9, 4) \& (9, 4)$ $\left(\frac{9+9}{2}, \frac{4+4}{2} \right) = (9, 4)$

9) $(1, 1) \& (9, 10)$ $\left(\frac{1+9}{2}, \frac{1+10}{2} \right) = (5, 5.5)$

10) $(3, 3) \& (0, 6)$ $\left(\frac{3+0}{2}, \frac{3+6}{2} \right) = (1.5, 4.5)$

11) $(0, 0) \& (0, 0)$ $\left(\frac{0+0}{2}, \frac{0+0}{2} \right) = (0, 0)$

12) $(0, 8) \& (10, 7)$ $\left(\frac{0+10}{2}, \frac{8+7}{2} \right) = (5, 7.5)$