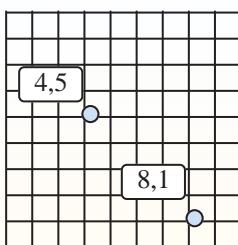




Finding Midpoint Based on Coordinates

Name: _____

Find the midpoint of each set of coordinates.

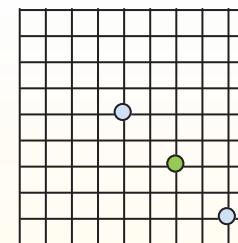


$$\text{Midpoint Formula} \\ \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

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

$$\left(\frac{4 + 8}{2}, \frac{5 + 1}{2} \right)$$

The midpoint is at
(6, 3)



Answers

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

1) (2, 9) & (5, 5)

2) (7, 0) & (10, 3)

3) (5, 1) & (5, 10)

4) (6, 8) & (0, 9)

5) (5, 2) & (4, 9)

6) (1, 3) & (4, 1)

7) (10, 0) & (10, 8)

8) (0, 3) & (8, 10)

9) (7, 3) & (9, 5)

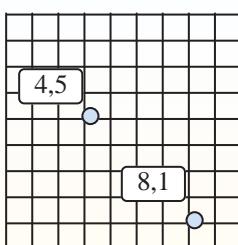
10) (0, 8) & (10, 10)

11) (4, 8) & (10, 9)

12) (9, 1) & (6, 9)

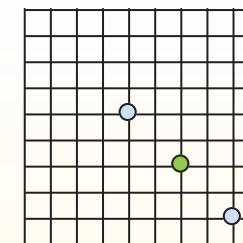


Find the midpoint of each set of coordinates.



Midpoint Formula
 $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$
 To find the midpoint of the coordinates (4,5) and (8,1), plug the values into the midpoint formula.
 $\left(\frac{4+8}{2}, \frac{5+1}{2} \right)$

The midpoint is at
 $(6, 3)$



Answers

1. **(3.5, 7)**
2. **(8.5, 1.5)**
3. **(5, 5.5)**
4. **(3, 8.5)**
5. **(4.5, 5.5)**
6. **(2.5, 2)**
7. **(10, 4)**
8. **(4, 6.5)**
9. **(8, 4)**
10. **(5, 9)**
11. **(7, 8.5)**
12. **(7.5, 5)**

- 1) $(2, 9) \& (5, 5)$ $\left(\frac{2+5}{2}, \frac{9+5}{2} \right) = (3.5, 7)$
- 2) $(7, 0) \& (10, 3)$ $\left(\frac{7+10}{2}, \frac{0+3}{2} \right) = (8.5, 1.5)$
- 3) $(5, 1) \& (5, 10)$ $\left(\frac{5+5}{2}, \frac{1+10}{2} \right) = (5, 5.5)$
- 4) $(6, 8) \& (0, 9)$ $\left(\frac{6+0}{2}, \frac{8+9}{2} \right) = (3, 8.5)$
- 5) $(5, 2) \& (4, 9)$ $\left(\frac{5+4}{2}, \frac{2+9}{2} \right) = (4.5, 5.5)$
- 6) $(1, 3) \& (4, 1)$ $\left(\frac{1+4}{2}, \frac{3+1}{2} \right) = (2.5, 2)$
- 7) $(10, 0) \& (10, 8)$ $\left(\frac{10+10}{2}, \frac{0+8}{2} \right) = (10, 4)$
- 8) $(0, 3) \& (8, 10)$ $\left(\frac{0+8}{2}, \frac{3+10}{2} \right) = (4, 6.5)$
- 9) $(7, 3) \& (9, 5)$ $\left(\frac{7+9}{2}, \frac{3+5}{2} \right) = (8, 4)$
- 10) $(0, 8) \& (10, 10)$ $\left(\frac{0+10}{2}, \frac{8+10}{2} \right) = (5, 9)$
- 11) $(4, 8) \& (10, 9)$ $\left(\frac{4+10}{2}, \frac{8+9}{2} \right) = (7, 8.5)$
- 12) $(9, 1) \& (6, 9)$ $\left(\frac{9+6}{2}, \frac{1+9}{2} \right) = (7.5, 5)$