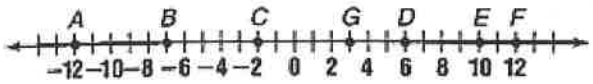
Name _____ Date _____

Midpoints

Use the number line to determine the coordinates of the midpoint for each segment.

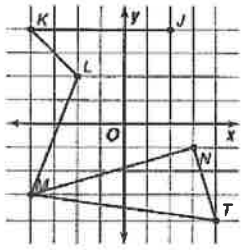


1. $\overline{DE}$ 8
2. $\overline{BD}$ $-\frac{1}{2}$
3. $\overline{AC}$ -7
4. $\overline{BF}$ $\frac{5}{2}$
5. $\overline{CF}$ 5

W, R, and S are points on the number line, where W is the midpoint of $\overline{RS}$. Using the values given, determine the value of the third point.

6. R = 4, S = -6 $W = -1$
7. R = 12, W = -3 $S = -18$
8. W = -4, S = 2 $R = -10$
9. S = 11, R = -2 $W = \frac{9}{2}$

Use the coordinate plane on the right to determine the coordinates of the midpoint for each segment.



10. $\overline{KJ}$ $(-1, 4)$
11. $\overline{ML}$ $(-3, -\frac{1}{2})$
12. $\overline{MT}$ $(0, -\frac{7}{2})$

Given the endpoints of each segment, determine the coordinates of the midpoint of the segment.

13. A(4, 8) B(10, 14) $(7, 11)$
14. C(-5, 14) D(7, -3) $(1, \frac{11}{2})$
15. E(-5, -9) F(6, 2) $(\frac{1}{2}, -\frac{7}{2})$
16. G(12, -5) H(-7, 9) $(\frac{5}{2}, 2)$

M is the midpoint of $\overline{KL}$. Given one endpoint and the midpoint, determine the coordinates of the other endpoint.

17. K(2, 6) M(8, 6) $L(14, 6)$
18. L(-5, 8) M(3, 4) $K(11, 0)$
19. M(4, -1) K(0, 3) $L(8, -5)$
20. M(-6, -1) L(-2, -5) $K(-10, 3)$