

Name: _____

In Exercises 1-3, use the marked figure.

1. $WP = 14$. Find WY .
2. $XP = 3x + 1$ and $PZ = 19$. Find x .
3. P is the midpoint of _____ and _____.

Find the midpoint of each segment with the given endpoints.

4. $A(-6, 4)$ and $B(2, -2)$
5. $C(3, -5)$ and $D(9, 1)$

Solve each problem.

6. $M(2, -1)$ is the midpoint of $\overline{RS}$. R has coordinates $(7, 3)$. Find the coordinates of S .
7. Use the Distance Formula to find EF . $E(1, 4)$ and $F(7, -4)$
8. Use the Distance Formula to find GH . $G(-4, -2)$ and $H(1, 10)$
9. C is the midpoint of $\overline{DE}$. $DC = 5x + 7$ and $CE = 8x - 11$. Find the length of $\overline{DE}$.
10. Line m bisects $\overline{JK}$ at P . $JP = 4x + 9$ and $PK = 7x - 15$. Find JK .

