Name: ....   **Class:** ....

Check Your Understanding

Example 1

Use the number line to find each measure.

```
        W          X              Z          Y
 ←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→
   -6 -5 -4 -3 -2 -1  0  1  2  3  4  5  6  7  8
```
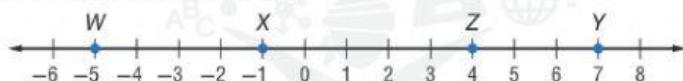
1. XY **2.** WZ

Example 2

TIME CAPSULE Graduating classes have buried time capsules on the campus of East Side High School for over twenty years. The points on the diagram show the position of three time capsules. Find the distance between each pair of time capsules.

3 $A(4, 9), B(2, -3)$
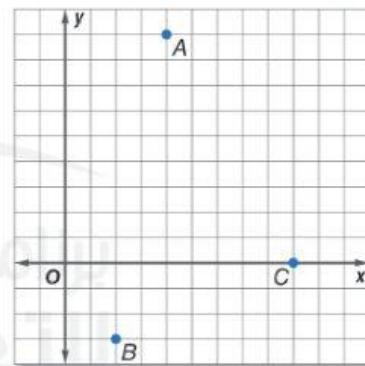
4. $A(4, 9), C(9, 0)$

5. $B(2, -3), C(9, 0)$

6. REASONING Which two time capsules are the closest to each other? Which are farthest apart?

Example 3

Use the number line to find the coordinate of the midpoint of each segment.

```
        A            B    C         D
 ←──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──┼──→
     -12      -6     0    6    12   18   24
```
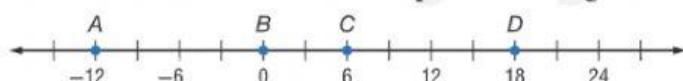
7. $\overline{AC}$ **8.** $\overline{BD}$

Example 4

Find the coordinates of the midpoint of a segment with the given endpoints.

9. $J(5, -3), K(3, -8)$ **10.** $M(7, 1), N(4, -1)$