Practice 1-5

If *GJ* = 32, find the value of each of the following.

1. *x*

2. *GH*

3. *HJ*

$$\overset{3x}{\underset{\underset{\displaystyle G}{\bullet}}{\rule{0pt}{0pt}}} \quad \overset{}{\underset{\underset{\displaystyle H}{\bullet}}{\rule{0pt}{0pt}}} \overset{x + 16}{\qquad} \underset{\underset{\displaystyle J}{\bullet}}{\rule{0pt}{0pt}}$$
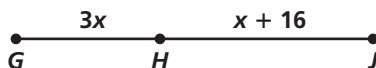
4. Find *PD* if the coordinate of *P* is −7 and the coordinate of *D* is −1.

5. Find *SK* if the coordinate of *S* is 17 and the coordinate of *K* is −5.

6. Find the coordinate of *B* if *AB* = 8 and the coordinate of *A* is −2.

7. Find the coordinate of *X* if *XY* = 1 and the coordinate of *Y* is 0.

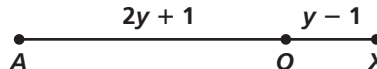**Find the length of each segment. Tell whether the segments are congruent.**

8. $\overline{AC}$ and $\overline{BD}$

9. $\overline{AD}$ and $\overline{BE}$
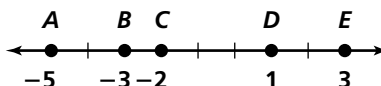
10. Find the midpoint of $\overline{AD}$.

A   B C   D E

−5 −3 −2   1   3

If *AX* = 45, find the value of each of the following.

11. *y*

12. *AQ*

13. *QX*

$$\overset{2y + 1}{\underset{\underset{\displaystyle A}{\bullet}}{\rule{0pt}{0pt}}} \qquad \overset{y - 1}{\underset{\underset{\displaystyle Q}{\bullet}}{\rule{0pt}{0pt}}} \underset{\underset{\displaystyle X}{\bullet}}{\rule{0pt}{0pt}}$$

14. If *AC* = 62, find the value of *x*.
Then find *AB* and *BC*.

15. If *AC* = 206, find the value of *x*.
Then find *AB* and *BC*.

$$\overset{3x - 4}{\underset{\underset{\displaystyle A}{\bullet}}{\rule{0pt}{0pt}}} \qquad \overset{3x - 4}{\underset{\underset{\displaystyle B}{\bullet}}{\rule{0pt}{0pt}}} \underset{\underset{\displaystyle C}{\bullet}}{\rule{0pt}{0pt}}$$