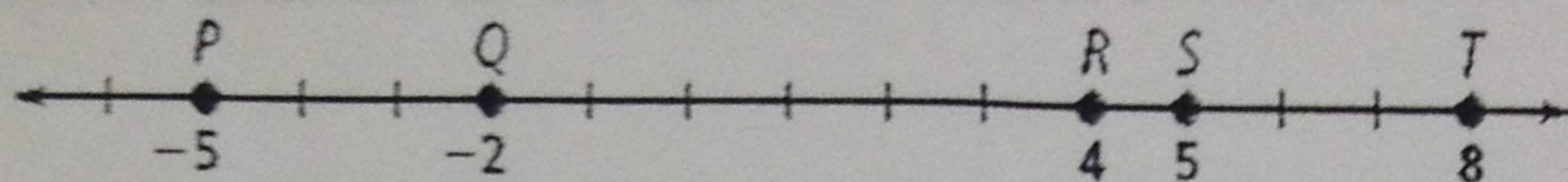


Segments and Segment Addition

Find the length of each segment. To start, find the coordinate of each endpoint.



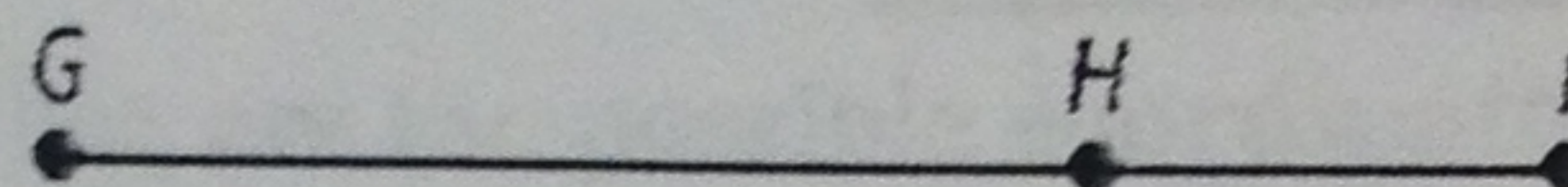
1. \overline{PR}

2. \overline{QT}

3. \overline{QS}

Use the number line at the right for Exercises 4–6.

4. If $GH = 31$ and $HI = 11$, then $GI = \square$.



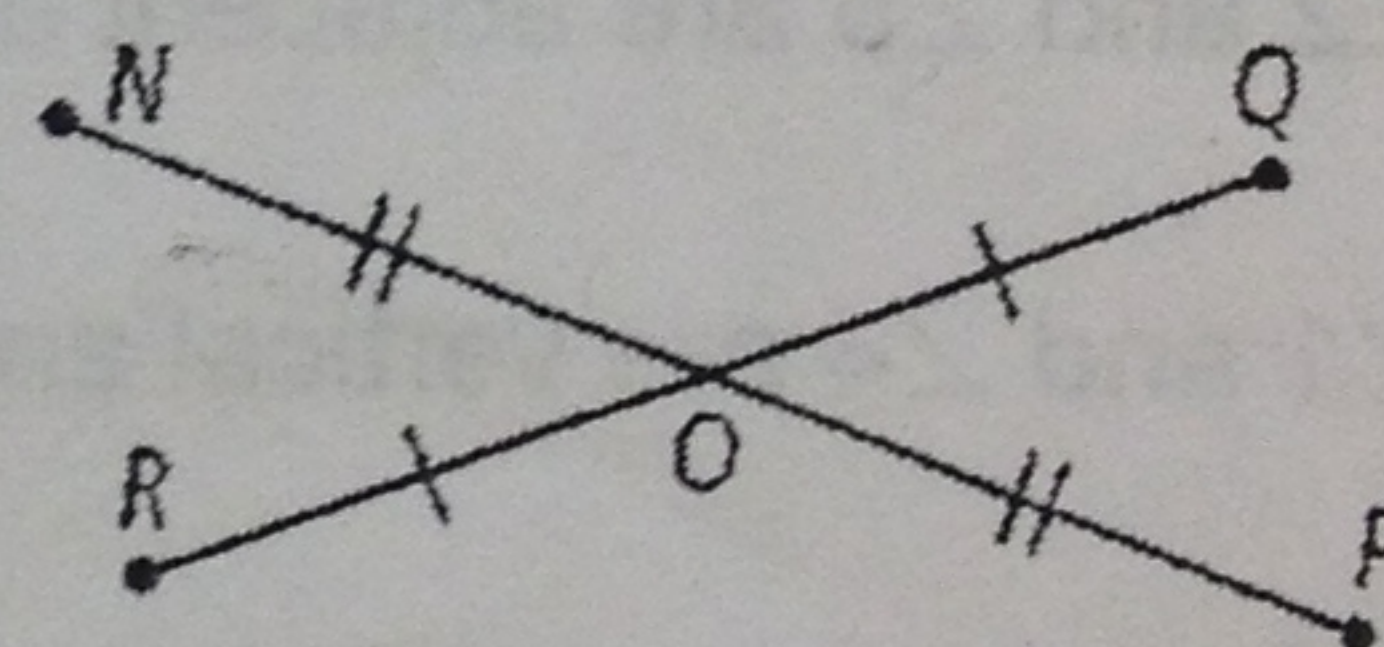
5. If $GH = 45$ and $GI = 61$, then $HI = \square$.

6. **Algebra** $GH = 7y + 3$, $HI = 3y - 5$, and $GI = 9y + 7$.

a. What is the value of y ?b. Find GH , HI , and GI .

Algebra Use the diagram at the right for Exercises 28–32.

13. If $NO = 17$ and $NP = 5x - 6$, find the value of x .

Then find NP and OP .

14. If $RO = 6 + x$ and $OQ = 2x + 1$, find the value of x . Then find RO , OQ , and RQ .

15. If $NO = 3x + 4$ and $NP = 10x - 10$, find the value of x . Then find NO , NP , and OP .

16. If $RO = 5x$ and $RQ = 12x - 20$, find the value of x . Then find RO , OQ , and RQ .