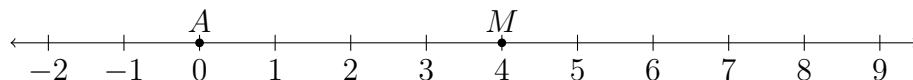


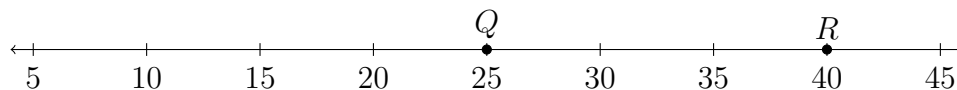
Name:

1.5 Extension: Find an endpoint given the midpoint

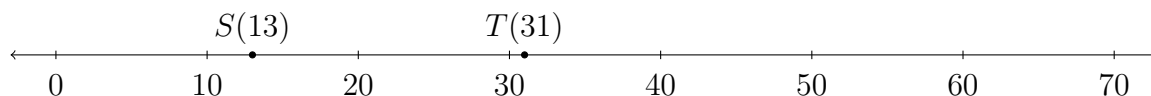
1. Given M is the midpoint of \overline{AB} , with $A = 0$ and $M = 4$. Find the value of point B and mark and label it on the number line.



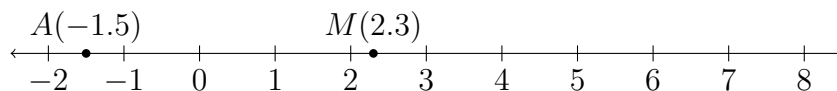
2. Given collinear points with Q the bisector of \overline{PR} , $Q(25)$ and $R(40)$. Find P , marking it and labeling it on the number line.



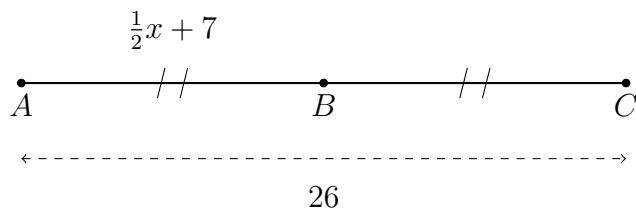
3. Given points $S(13)$ and $T(31)$, find the value of U such that T is the midpoint of \overline{SU} . Mark U and label it on the number line.



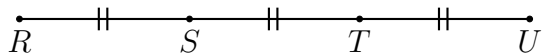
4. The point $M(2.3)$ is the midpoint of segment \overline{AB} . Given $A(-1.5)$, find the value of B . Mark and label it below.



5. Point B bisects segment \overline{AC} , $AB = \frac{1}{2}x + 7$ and $AC = 26$. Find x .



6. Given the points S and T trisect the line segment \overline{RU} , as shown below. If $RT = 7$, find RU .



7. The point Q lies on \overline{AB} three quarters of the way from A to B . Given $AB = 28$.
- Mark and label the location of Q . (measure)
 - Find AQ . State an equation for full credit.

