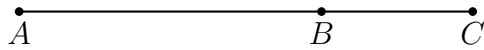


Name:

2.9 Homework: Calculations in geometry

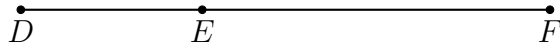
1. Given \overline{ABC} , $BC = 36.9$, and $AC = 87.3$.

Find AB .

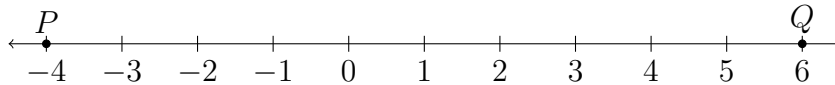


2. Given \overline{DEF} , $DF = 75$ and \overline{DE} is half the length of \overline{EF} .

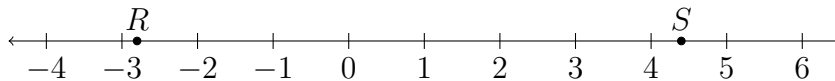
Find DE .



3. Given \overleftrightarrow{PQ} as shown on the number line. Divide segment \overline{PQ} into five congruent segments by marking and labeling the points R , S , T , and U on the numberline.

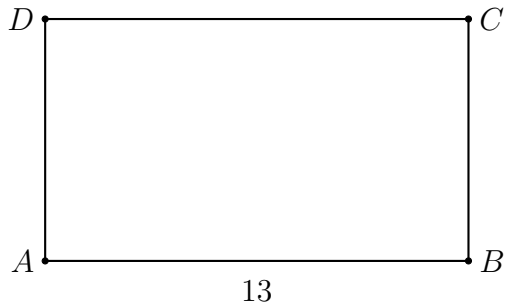


4. Given \overleftrightarrow{RS} as shown on the number line, with $R = -2.8$ and $S = 4.4$.

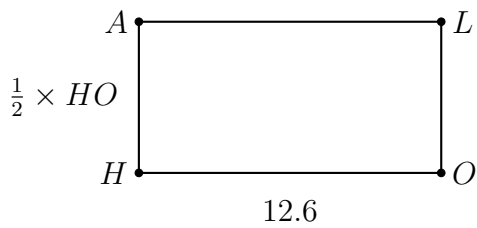


The points T and U trisect \overline{RS} . Find their values, and mark and label them on the numberline.

5. The rectangle $ABCD$, shown below, has a perimeter of 42, and $AB = 13$. Find the area of the rectangle.



6. Given the rectangle $HOLA$ shown below, with length $HO = 12.6$. The width AH is one-half of the length HO . Find the perimeter of the rectangle.



7. In the following two problems, solve for the value of x .

(a) $\frac{2}{7}(16x + 5) = 10\frac{4}{7}$

(b) $x^2 - 8x - 9 = 0$