Name:

## 1.7 Homework: Calculations in geometry

1. Given  $\overline{ABC}$ , AB=84, and AC=116. Find BC.



2. Given  $\overline{DEF}$ ,  $DE = 7\frac{1}{3}$ , and  $EF = 3\frac{1}{6}$ . Find DF.

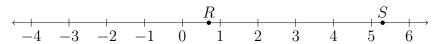


3. Given  $\overrightarrow{PQ}$  as shown on the number line.



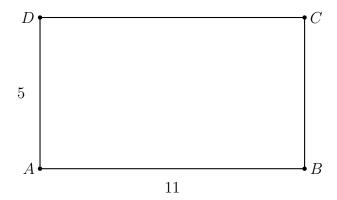
What is the exact distance on the number line between the points P and Q?

4. Given  $\overrightarrow{RS}$  as shown on the number line, with R=0.7 and S=5.3.

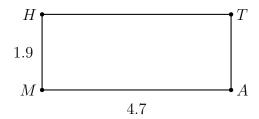


What is the distance on the number line between the points R and S?

5. Given the rectangle ABCD shown below, with AB=11 and AD=5. Find the area of the rectangle.



6. Given the rectangle MATH shown below, with MA=4.7 and MH=1.9. Find the area of the rectangle.



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

(a) 
$$\frac{1}{2}(x+1) = -5$$

(b) 
$$x - 4.5 = 2.8 - x$$