1-7Exam-spicy

1. Given \overline{ABC} , AB = 4, and AC = 25.

Find BC.

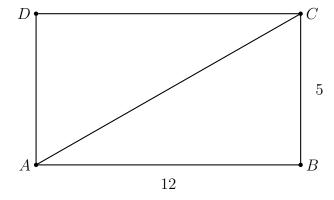


2. Given \overleftrightarrow{PQ} as shown on the number line, with P=-3 and Q=5.5.



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

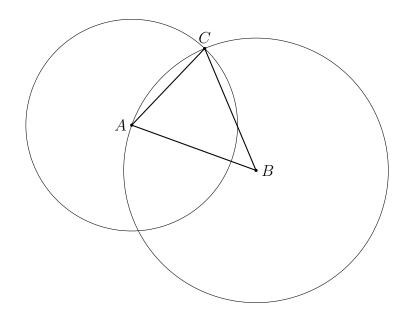
3. Given the rectangle ABCD shown below, with AB=12 and BC=5. The diagonal \overline{AC} is drawn to create two triangles. Find the area of the lower triangle, $\triangle ABC$.



4. Given \overline{WXYZ} , $WX=3\frac{1}{2}$, $XY=4\frac{3}{4}$, and $YZ=1\frac{1}{4}$. Find WZ.



5. A student constructs a triangle with a given side, \overline{AB} as shown below. Is $\triangle ABC$ equilateral? Justify your answer by explaining what was done incorrectly and how it should have been done.



6. In the following two problems, solve for the value of x by factoring.

(a)
$$x^2 + 6x = -5$$

(b)
$$x^2 = x + 12$$