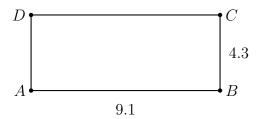
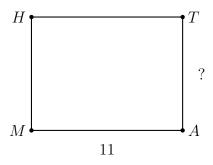
2.5 Homework: Area, perimeter, line segments

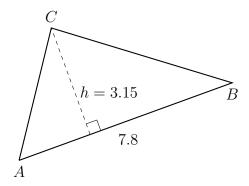
1. Given the rectangle ABCD shown below, with AB=9.1 and BC=4.3. Find the area of the rectangle.



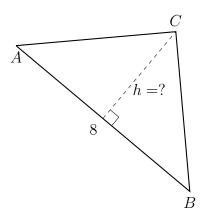
2. The rectangle MATH has an area of 102, with length MA = 12. Find the width of the rectangle AT.



3. Find the area of $\triangle ABC$. The altitude h of the triangle is 3.15 centimeters and the base AB=7.8 cm.



4. One side of the $\triangle ABC$ has a length AB=8. The triangle's area is 44. Find the length of the altitude h of the triangle to vertex C and perpendicular to side \overline{AB} .



5. Given \overrightarrow{RS} as shown on the number line, with R = -1.0 and S = 5.6.



(a) What is the exact distance on the number line between the points R and S?

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

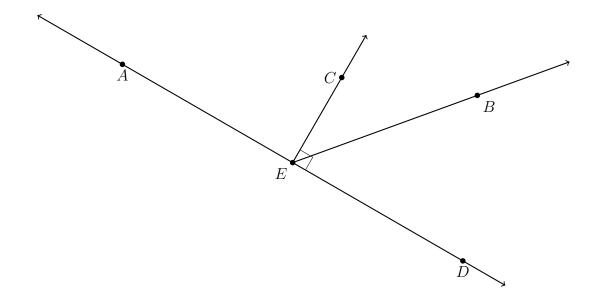
6. Given \overline{ABC} , $AB = \frac{2}{3}$, and $AC = 3\frac{1}{3}$.

Find BC.

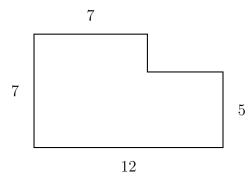


The postulate used in this problem is the ______.

- 7. Given the diagram shown below.
 - (a) Measure the angle AEB. $m \angle AEB =$
 - (b) Name an angle that is supplementary to $\angle DEB$:
 - (c) Name a pair of opposite rays:



8. Find the perimeter P of the shape shown below, given the side lengths marked (not drawn to scale). All angles are 90°. Completely mark the diagram with the two missing lengths and show an equation for P as a sum of each side's length.



9. Given the collinear points P, Q, and R, with PQ = 4x + 4, QR = 2x + 2, and PR = 5x + 12. Find PQ.

Complete all steps for full credit: the drawing to the top right, an equation and solution for x on the left, followed by the answer to the question. Write the check to the bottom right.