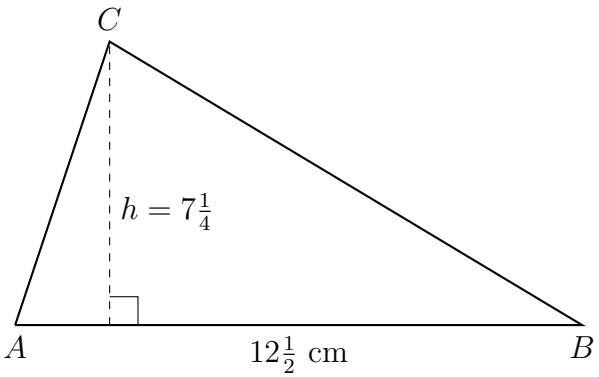
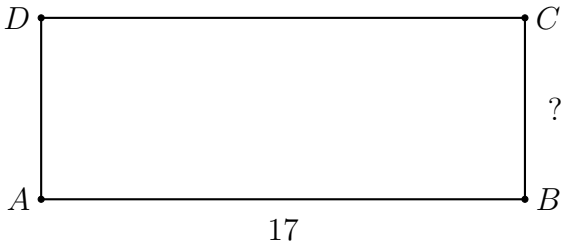
2.4 Homework: Solving for lengths

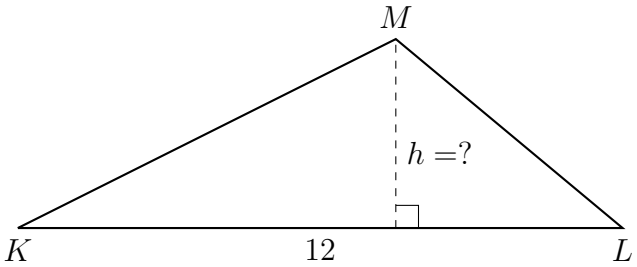
1. Find the area of $\triangle ABC$. The altitude h of the triangle is $7\frac{1}{4}$ centimeters and the base $AB = 12\frac{1}{2}$ cm.



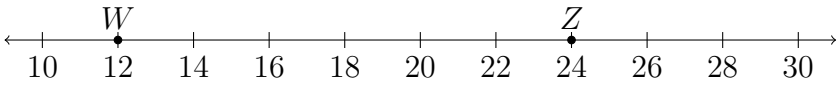
2. Given the rectangle $ABCD$ shown below, with $AB = 17$. If the area of the rectangle is 102, find BC.



3. Given that the area of $\triangle KLM$ is 24 and the base $KL = 12$. Find the altitude h of the triangle.



4. Given $\overleftrightarrow{WZ}$ as shown on the number line.



Mark and label two points X and Y that trisect $\overline{WZ}$.

5. Given $\overline{PQR}$, with $PQ = 4x - 4$, $QR = 2x + 3$, and $PR = 5x + 9$. Find PR. Complete all the steps for full credit.

6. Given $\overline{DEFG}$, $DE = 3\frac{1}{3}$, $EF = 4\frac{2}{9}$, and $FG = 2\frac{4}{9}$. (diagram not to scale)

Find DG.