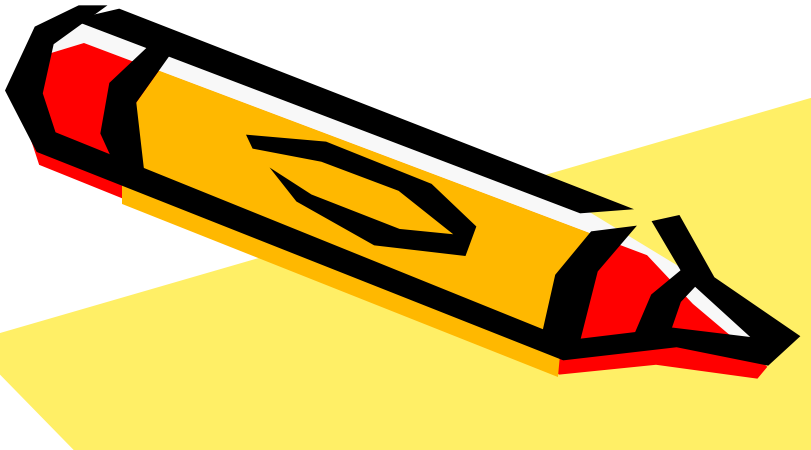
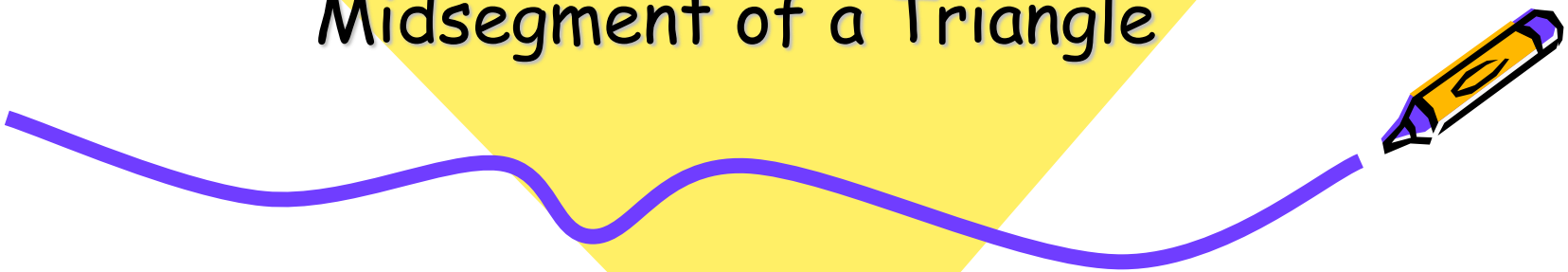


Geometry

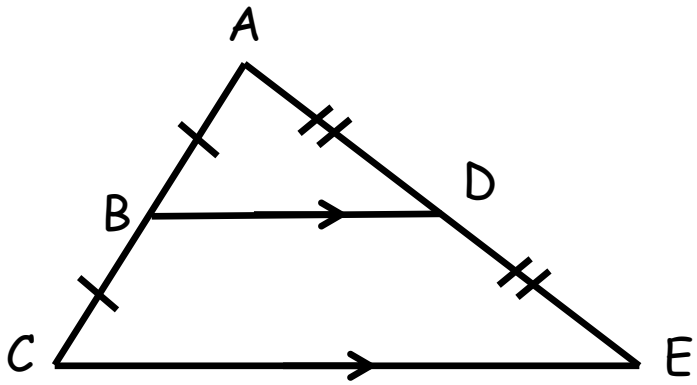
Midsegment of a Triangle



Vocabulary

Midsegment: a segment that connects the midpoints of two sides of a triangle.

The midsegment is parallel to the third side and its length equals one half the measurement of the third side.



Since B and D are the midpoints of their sides, we know that:

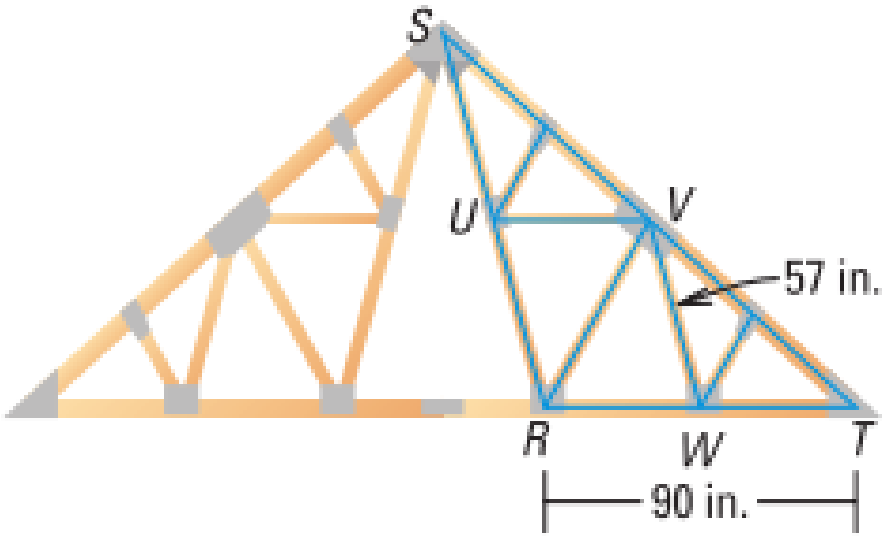
$\overline{BD} \parallel \overline{CE}$

$BD = \frac{1}{2} CE$

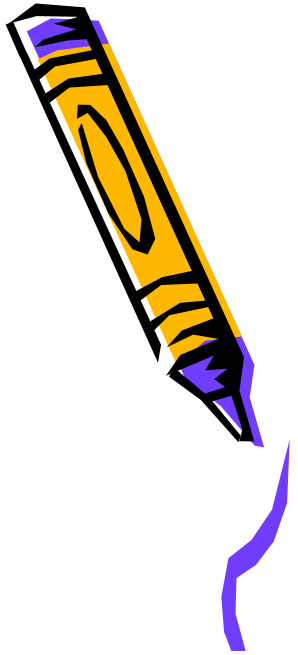
Midsegment

1. $\overline{UV}$ and $\overline{VW}$ are midsegments of ΔSRT. Find UV and RS.

2. Suppose UW is 81 inches. Find VS.



Midsegment

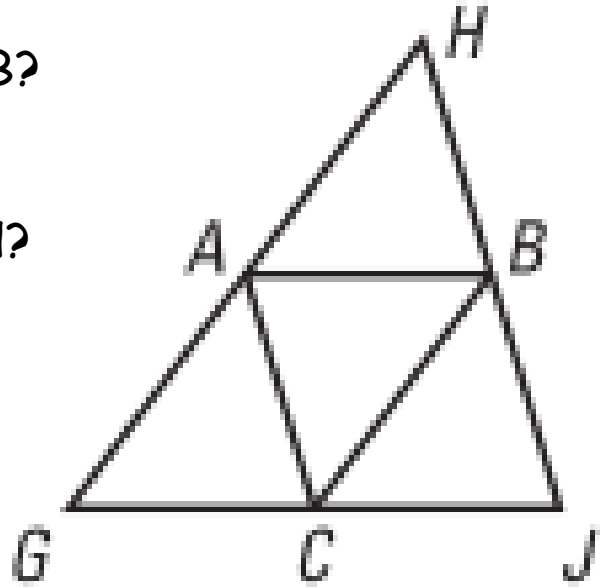


A, B, and C are midpoints of the sides.

1. If $AB = 3x + 8$ and $GJ = 2x + 24$, what is AB?

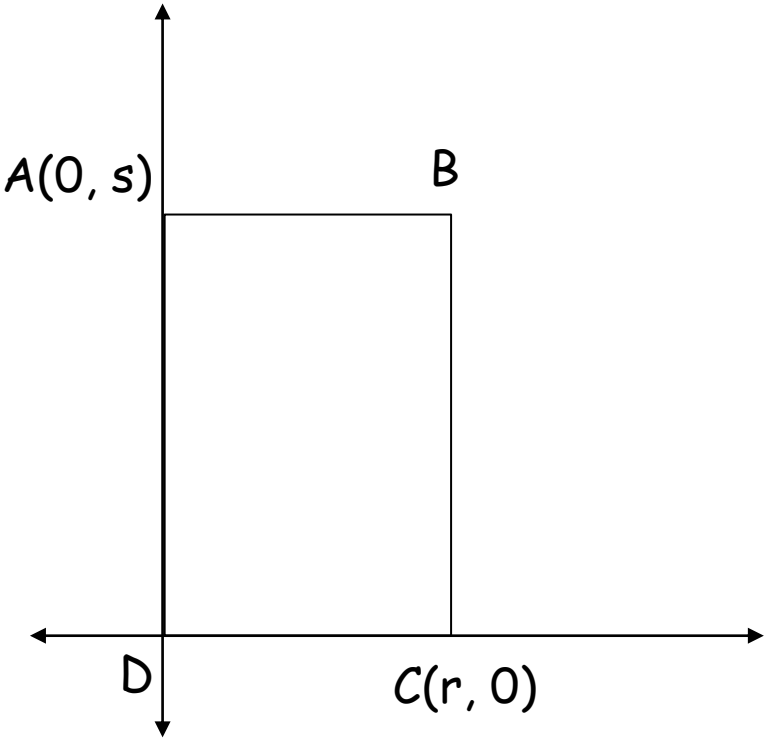
2. If $AC = 3y - 5$ and $HJ = 4y + 2$, what is HB?

3. If $GH = 7z - 1$ and $BC = 4z - 3$, what is GH?



Variable Values on the Coordinate Plane

With variable values on the coordinate plane, all work will be in terms of the provided variables. We will not have final numerical values in many cases.



What are the ordered pairs for points B and D?

Variable Values on the Coordinate Plane

1. What is the slope of $\overline{AC}$?
2. What is the length of $\overline{AC}$?