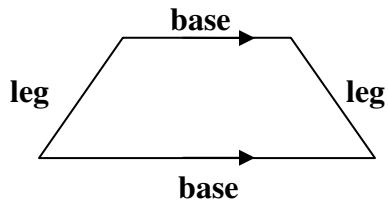


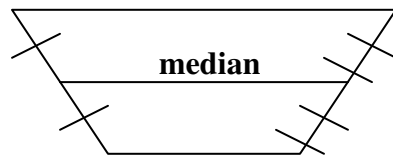
Notes for Lesson 5-5 : Trapezoids

A quadrilateral with exactly one pair of parallel sides is called a **trapezoid**. The parallel sides are called the **bases** and the other sides are the **legs**.

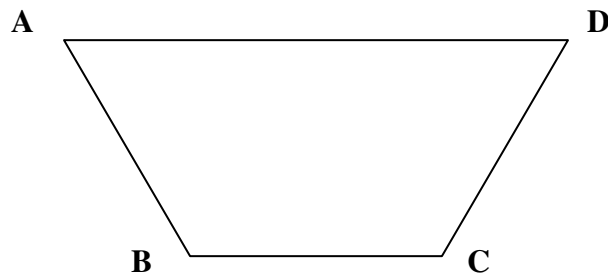


A trapezoid with congruent legs and base angles is called an **isosceles trapezoid**.

The **median** of a trapezoid is the segment that joins the midpoints of the legs.



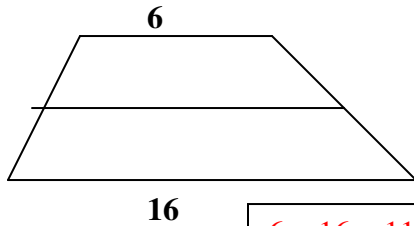
Use your ruler to find the midpoint of AB and CD (name them M and N). Connect the midpoints and find the lengths of AD, BC, and MN.



Theorem 5-19: The median of a trapezoid is 1) parallel to the bases and 2) has a length equal to the average of the base lengths.

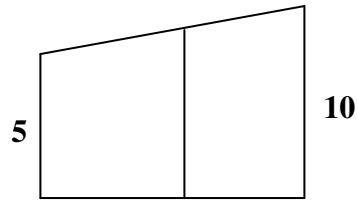
Example 1: Find the length of the median of each trapezoid

A)



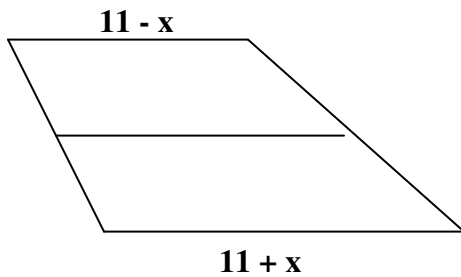
$$\frac{6 + 16}{2} = 11$$

B)



$$\frac{5 + 10}{2} = 7.5$$

C)



$$\frac{11 - x + 11 + x}{2} = 11$$

Example 2: One angle of an isosceles trapezoid has measure 57° . Find the measures of the other three angles.

