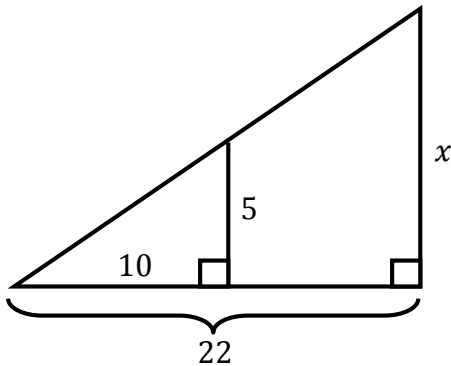# NOTES 8.2: INDIRECT MEASUREMENT

Objective:_____

_____
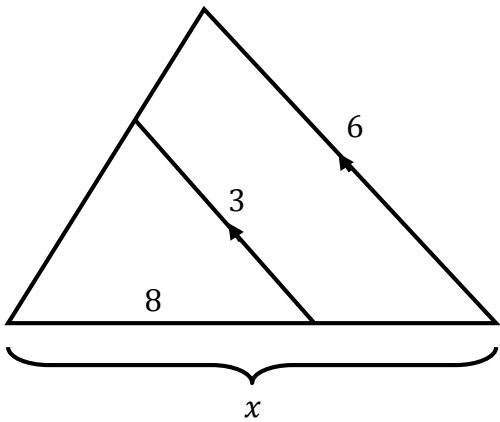
SIMILAR POLYGONS:

Similar triangles can be used in ***INDIRECT MEASUREMENT***.
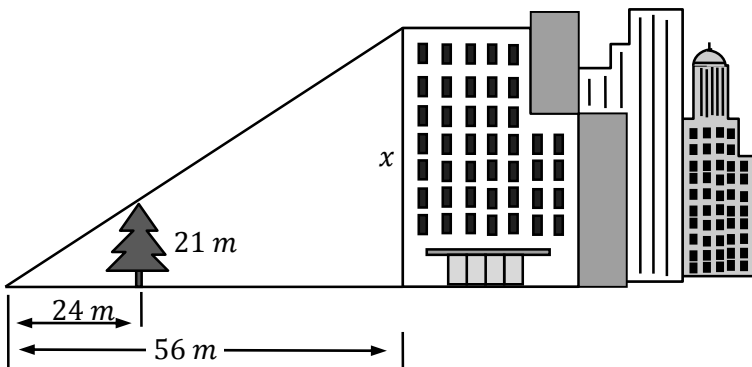
EXAMPLE 1: Find the value of 'x'.

x

5

10

22

EXAMPLE 2: Find the value of 'x'.

6

3

8

x

EXAMPLE 3: Solve for 'x'.

x

21 m

24 m

56 m

EXAMPLE 4: When Stephanie stands 2 feet from a lamp post, her shadow is 3 feet long. If Stephanie is 5 feet tall, how tall is the lamp post?

EXAMPLE 5: Charlie walks away from a tree along its shadow until his head is in line with the top of the tree's shadow. Charlie is standing 15 feet from the base of the tree and 6 feet from the end of the shadow. Charlie is 5 feet tall. What is the height of the tree?

EXAMPLE 6: A mirror is on the ground 8 ft from Ricky and 19 ft from a flag pole. Ricky can see the top of the pole in the mirror. If Ricky is 6 ft tall, how tall is the flag pole?

1/11/17