

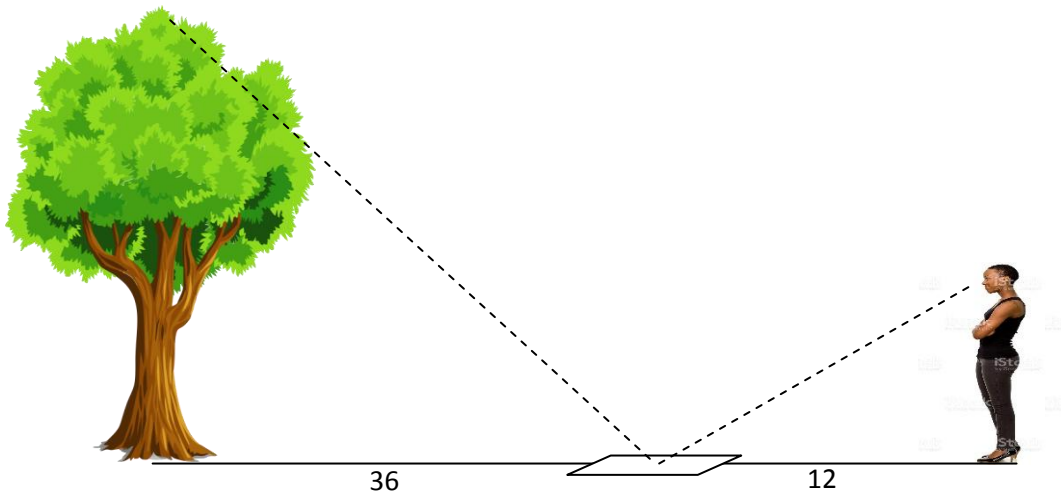
Topic 23: Similar Triangles

Version Practice

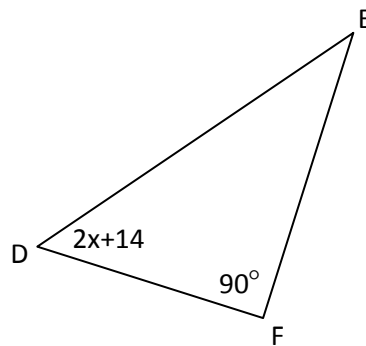
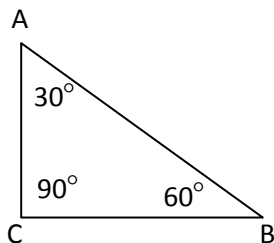
1) Compute the height of the building in this problem based upon the given shadows. It is known that the Streetlights are 15 feet high.



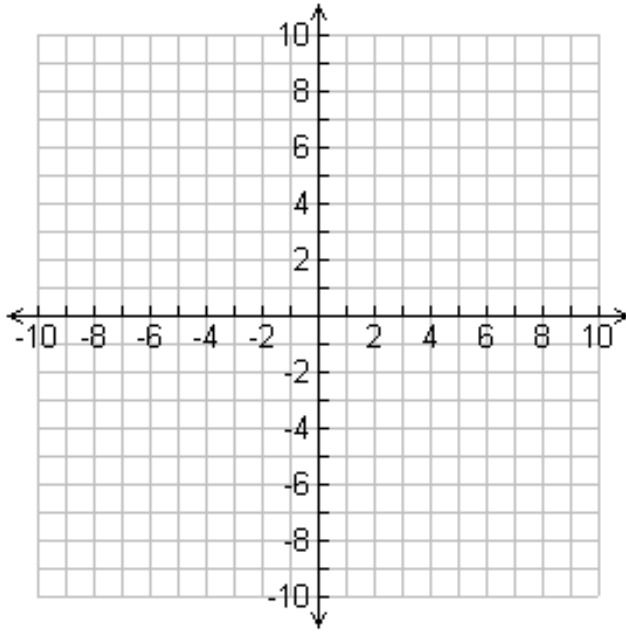
2) A woman places a mirror on the ground and aligns it to see the top of the tree. The woman's eyes are 5 and a half feet above the ground. Set up the proportions and solve for the height of the tree.



3) $\triangle ABC \sim \triangle DEF$. What is the value of x ?



4) Graph triangle A (6,1), B (6,9) & C (3,1)



a) Reflect triangle ABC across the Y-axis: A' (,) B' (,) C' (,)

b) Now translate triangle $A'B'C' \rightarrow (x+2,y-4)$: A'' (,) B'' (,) C'' (,)

c) Now keep point C'' constant (AKA Central) and rescale (dilation) the figure to $1/2$ the size:

A''' (,) B''' (,) C''' (,)