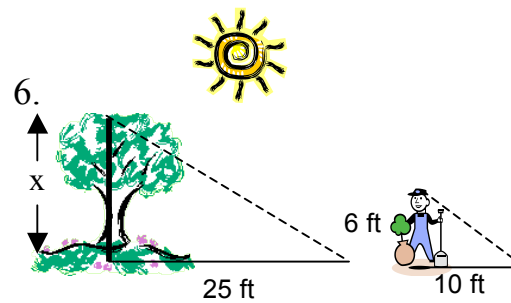
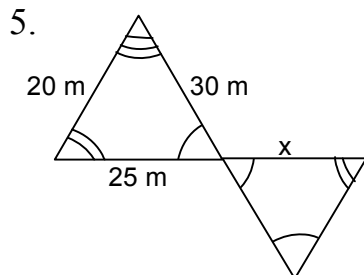
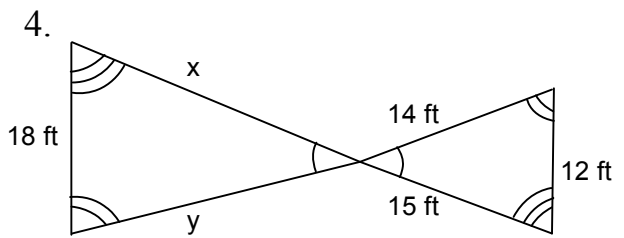
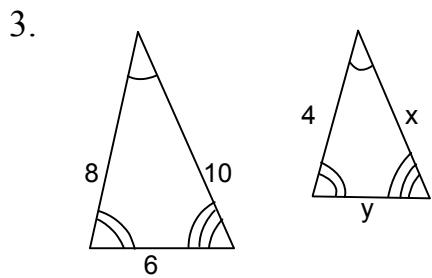
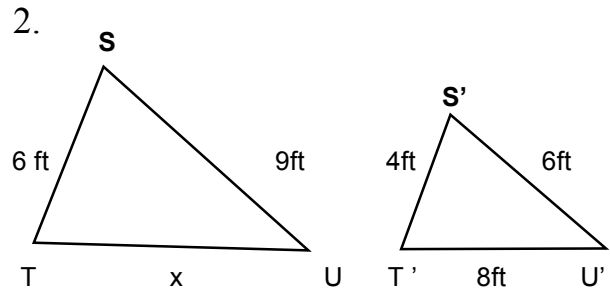
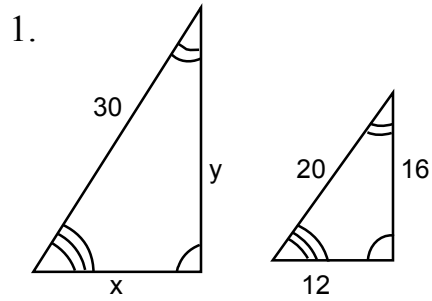


Similar Polygons

Angle-Angle Postulate

Using the AAP, identify the similar triangles, then set up proportions based on the similarity.

Find the indicated measures.



7. A vertical flagpole casts a shadow 12 feet long at the same time that a nearby vertical post 5 feet high casts a shadow 3 feet long. Find the height of the flagpole.

8. A 10-foot ladder touches the side of a building at a point 8 feet above the ground. At what height would a 15-foot ladder touch the building if it makes the same angle with the ground as the longer ladder?

9. A 5-foot pole has a 4-foot shadow. At the same time, what would be the length of the shadow of a 45-foot tall tree?

10. A person 6 feet tall has a shadow 4 feet long. How tall is a building that has a shadow 27 feet long?