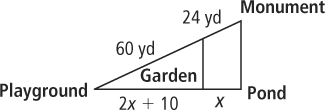
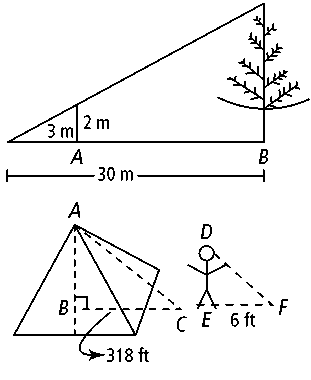
**Example 1:**

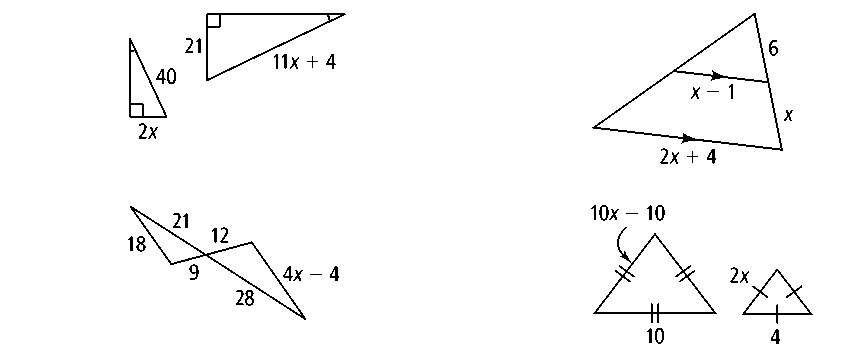
In the afternoon, Karl stands next to his house and measures his shadow and the house’s shadow. Karl’s shadow is 8 ft long. The house’s shadow is 48 ft long. If Karl is 6 ft tall, how tall is his house?

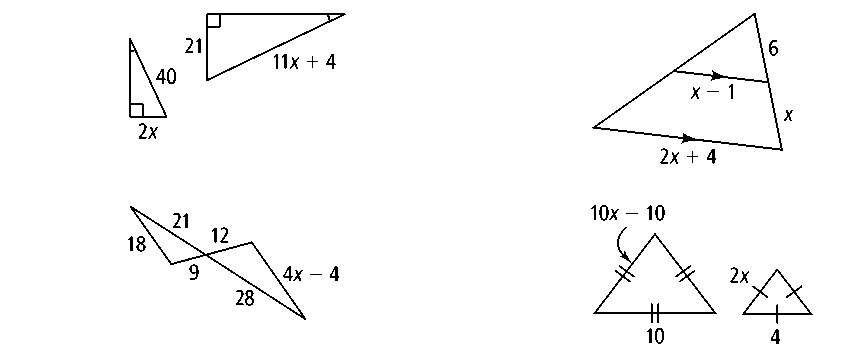
**Example 2:**

A 1.4-m tall child is standing next to a flagpole. The child’s shadow is 1.2 m long. At the same time, the shadow of the flagpole is 7.5 m long. How tall is the flagpole?

**Practice:**

1. The map at the right shows the walking paths at a local park. The garden walkway is parallel to the walkway between the monument and the pond. How long is the path from the pond to the playground?
2. A 1.6-m-tall woman stands next to the Eiffel Tower. At this time of day, her shadow is 0.5 m long. At the same time, the tower’s shadow is 93.75 m long. How tall is the Eiffel Tower?
3. A stick 2 m long is placed vertically at point *B.* The top of the stick is in line with the top of a tree as seen from point *A,* which is 3 m from the stick and 30 m from the tree. How tall is the tree?
4. **The triangles are similar. Find the value of *x.***





**Review**: What are the three triangle similarity Postulates?