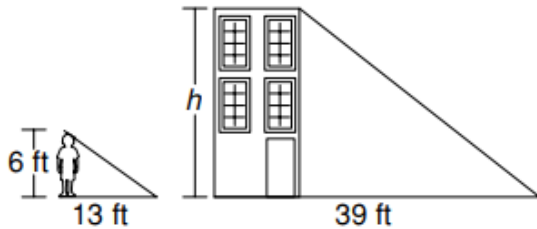
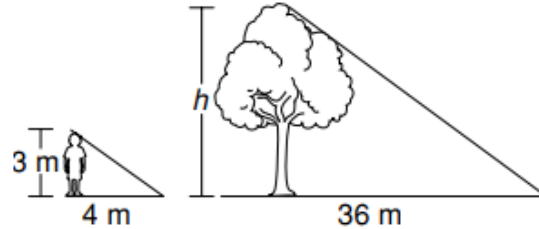


## Shadow Method-Indirect Measurement Practice

1. Use similar triangles to find the height of the building.



2. Use similar triangles to find the height of the tree.



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3. A lamppost casts a shadow that is 15 yards long. A 3-foot-tall mailbox casts a shadow that is 5 yards long. How tall is the lamppost?

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4. An 8-foot-tall statue stands in the park and casts a shadow that is 16 feet long. A dog stands next to it and is 3 feet tall. How long is the dog's shadow?

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5. A building casts a shadow that is 420 meters long. At the same time, a person who is 2 meters tall casts a shadow that is 24 meters long. How tall is the building?

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6. On a sunny day around noon, a tree casts a shadow that is 12 feet long. At the same time, a person who is 6 feet tall standing beside the tree casts a shadow that is 2 feet long. How tall is the tree?

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7. A pole casts a shadow that is 21 feet long. A 3-foot-tall child standing next to the pole casts a shadow that is 9 feet long. How tall is the pole?

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8. Jeremy has two trophies next to each other sitting in the window of his room. His football trophy is 7 inches tall and his basketball trophy is 13 inches tall. As the light shines in, the basketball trophy's shadow measures 26 inches. How long is the football trophy's shadow?

**OPEN ENDED** Describe a situation that requires indirect measurement. Explain how to solve the problem.