

Solve word problems using the Pythagorean Theorem

Draw a picture for each, and use the Pythagorean Theorem to solve

1.) A fire truck parks 16 feet away from a building. The fire truck extends its ladder 30 feet to the very top of the building. How tall is the building?

2.) A rope from the top of a mast on a sailboat is attached to a point 20 feet from the mast. The rope is 29 feet long. How long is the mast?

3.) A tree that is 9 feet high casts a shadow that is 12 feet long. What is the distance from the end of the tree to the top of the shadow it casts?

4.) An apartment window is 12 feet above the ground. The top of a 15-foot ladder is resting on the windowsill. How far from the foot of the building is the bottom of the ladder?

--

Solve word problems using the Pythagorean Theorem

Draw a picture for each, and use the Pythagorean Theorem to solve

1.) A fire truck parks 16 feet away from a building. The fire truck extends its ladder 30 feet to the very top of the building. How tall is the building?

2.) A rope from the top of a mast on a sailboat is attached to a point 20 feet from the mast. The rope is 29 feet long. How long is the mast?

3.) A tree that is 9 feet high casts a shadow that is 12 feet long. What is the distance from the end of the tree to the top of the shadow it casts?

4.) An apartment window is 12 feet above the ground. The top of a 15-foot ladder is resting on the windowsill. How far from the foot of the building is the bottom of the ladder?