

40. A couple is taking a balloon ride. After 25 minutes aloft, they measure the angle of depression from the balloon to its launch place as 16° . They are 180 ft above ground. Find the distance from the balloon to its launch place.
41. A surveyor is 300 ft from the base of an apartment building. The angle of elevation to the top of the building is 24° , and her angle-measuring device is 5 ft above the ground. Find the height of the building.
42. Oriana is flying a kite. She lets out 105 ft of string and anchors it to the ground. She determines that the angle of elevation of the kite is 48° . Find the height the kite is from the ground.
43. Two office buildings are 100 ft apart. From the edge of the shorter building, the angle of elevation to the top of the taller building is 28° , and the angle of depression to the bottom is 42° . How tall is each building? Round to the nearest foot.

