Angles of Elevation and Depression



1. Nia flies a kite on a 40-ft string. The string has a 50° angle of elevation. How high above the ground is the kite?



2. From the top of an 80-ft tower, the angle of depression to a stake on the ground is 72°. How far is the stake from the foot of the tower?



3. Skylar stands 200 feet from a building to measure its height using a surveying instrument that is 4 feet above the ground. The angle of elevation to the top of the building is 35°. How tall is the building?



4. Buildings A and B are across the street from each other, 35 meters apart. From a point on the roof of Building A, the angle of elevation to the top of Building B is 24° and the angle of depression to the base of Building B is 34°. How tall is each building?

