

1. A helicopter hovers 1000 feet above a small island. The angle of depression from the helicopter to a point P on the coast is 36° . How far off the coast is the island?
2. A 50-foot-high tower is secured with a guy-wire anchored 8 feet from the base of the tower. What angle will the guy-wire make with the ground?
3. The angle of elevation of the top of a church to a point 100 feet away from the base is 55° . Find the height of the church.