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### More Trig Applications

1. The flagpole in front of a school casts a shadow 40 feet long when the measurement of the angle of elevation to the sun is  $31^{\circ} 20'$ . How tall is the flagpole?
2. Aaron is standing 300 meters from the base of a radio tower. The angle of elevation to the top of the tower is  $40^{\circ}$ . How tall is the tower?
3. According to the pilot's instruments, the angle of depression to an aircraft carrier from a plane that is 1000 feet above the water is  $63^{\circ} 18'$ . How far is the plane from the carrier?
4. A railroad track rises 10 feet for every 400 feet of track. What is the angle that the track forms with the horizontal?

