1) A 17-foot ladder is leaning against a building. The base of the ladder is 8 feet away from the base of the building. How far up the building is the top of the ladder resting?

2) A bird is perched in a tree. It is 35 feet off the ground. It sees a piece of bread on the ground 48 feet from the base of the tree. How far will the bird have to fly to get the bread (round to the nearest hundredth)?

3) A boy is sitting on the floor flying a kite. He has 415 feet of string. If the kite is 210 feet high, find the angle of elevation.

4) A ladder is leaning against a building. If the angle of depression is 58° and the base of the ladder is 8 feet from the base of the building? How long is the ladder?

5) A boy is sitting on the floor flying a kite. He has 450 feet of string. The angle of elevation is 64°. How high is the kite?

6) An apple tree casts a 54-foot shadow. If the angle of depression is 36°, how tall is the tree?

9) An eagle flies 36 yards north and then 160 yards west. How far is the bird from the

staring point?

Answer Key

1	15 feet
2	59.41 feet
3	30.4°
4	15.1 feet
5	404.5 feet
6	39.2 feet
7	54.6 feet
8	73°
9	164 yards