Trigonometry Test Review

Solve each problem. You will need to use your own paper. Please remember to round side lengths to the nearest hundredth and angles to the nearest degree.



- 7. A tree casts a shadow of 28 m. The elevation of the sun is 49°. How tall is the tree?
- 8. Shane is 61 feet high on a ride at an amusement park. The angle of depression to the park entrance is 42°, and the angle of depression to his friends standing below is 80°. How far from the entrance are his friends standing?



- 9. A 30 foot tree broke from its base and fell against a house. If the tree hit the house 18 feet above the ground, what angle is the tree forming with the house?
- 10. A freeway entrance ramp has an elevation of 15°. If the vertical lift is 22 feet, what is the distance along the ramp?
- 11. Lauren is at the top of a 15 m lookout tower. From an angle of depression of 25°, she sees Evan coming toward her. How far is Evan from the base of the tower?
- 12. Rosalinda has a rocket that can travel 1500 feet before exploding. On the 4th of July, she lights the rocket at an elevation of 75°. How high will the rocket be when it explodes?
- 13. Mark has two sticks, 25 in. and 20 in. If he places them end to end perpendicularly, what two acute angles would be formed when he added the hypotenuse?