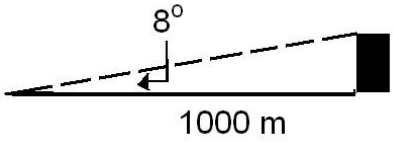
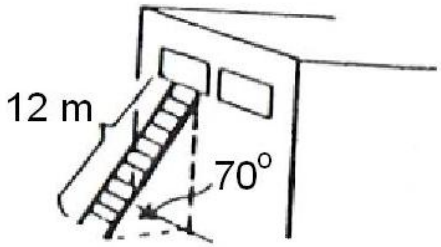
DIRECTIONS: Give lengths to the nearest tenth of a unit and angle measures to the nearest degree.

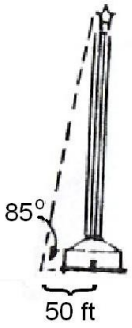
1. How tall is the building?



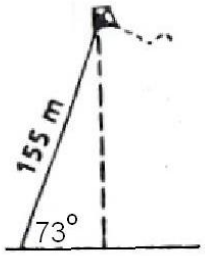
2. How far up will the ladder reach?



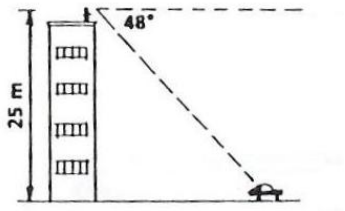
3. How tall is the monument?



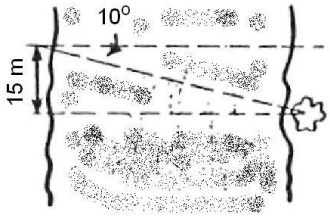
4. How high above the ground is the kite?



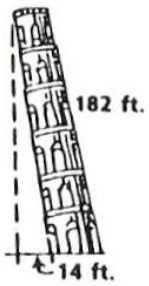
5. How far from the building is the car?



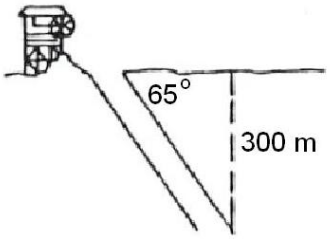
6. How wide is the river?



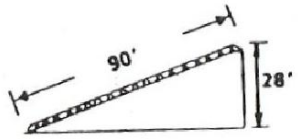
7. A rock dropped from the top of the Leaning Tower of Pisa falls to a point 14 feet from its base. If the tower is 182 feet tall, at what angle does it lean at the ground?



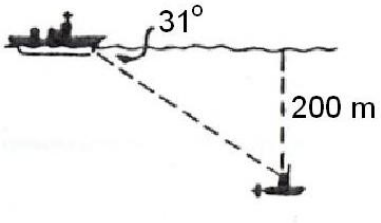
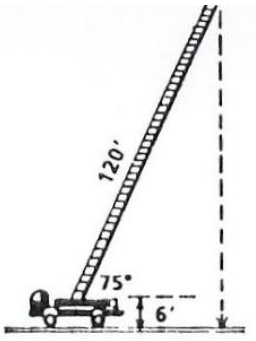
8. A mine shaft is 300 m deep and makes an angle of 65° with the horizontal ground. How long is the shaft?



9. A 90-foot escalator rises 28 feet vertically. What is the angle that the escalator makes with the floor?



10. Sonar on a destroyer detects a submarine at a depth of 200 m. If the angle is 31°, how far apart are the two vessels?



11. A ladder is mounted on a fire truck, six feet above the ground. If the maximum length of the ladder is 120 feet and the maximum angle to which it can be raised is 75°, how high up will it reach?