# Module 11 Performance Assessment

1. Find the base and altitude of an isosceles triangle whose vertex angle is 80º and whose congruent sides have lengths of 80 feet.
2. You are standing 75 meters from the base of the Jin Mao Building in Shanghai, China. You estimate the angle of elevation to the top of the building is . What is the approximate height of the building? Suppose one of your friends is at the top of the building. What is the distance between you and your friends?
3. You are in school from 8:00 AM to 3:00 PM. Draw a diagram that shows the number of rotations completed by the minute hand of the clock during this time. Determine the measure of the angle generated by the minute hand, giving the answer in both degrees and radians.
4. You and a friend are playing soccer. Both of you kick the ball with an initial speed of 42 feet per second. Your kick was projected at an angle of and your friend’s kick was projected at an angle of . About how much farther will your soccer ball go than your friend’s soccer ball?
5. Two iron wrecking balls with a height of 5 feet each are hanging straight down on ropes, one 12feet long and the other 8 feet long. The balls are 28 feet apart. If they are swung to meet, what will the angle  be between them in the resulting triangle?