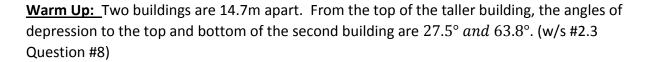
MCF 3MI Unit #2

2.4 Problems



Problem #1: An equilateral triangle is inscribed in a circle. The radius of the circle is 10.0 cm. Calculate the side length of the triangle.

MCF 3MI	Unit #2
Problem #2: A child is flying a kite. The string is 180m long and makes an angle of 39° w ground. The child's hands are at a height of 1.25m. Determine the height of the kite.	ith the
Problem #3: A cylindrical oil tank is 55.3m high and 28.4m in diameter. The top of the tareached by a spiral stairway that circles the tank once. Calculate the angle of inclination of stairway to the nearest degree.	

MCF 3MI Unit #2

<u>Problem #4:</u> The distance between two office towers measured using electronic tape, measures 73m. From the 9^{th} floor of the shorter tower, a clinometer was used to measure the angle of elevation of the top of the taller tower. The angle is 31° . From the same floor, the angle of depression to the base of the taller tower is 42° . Calculate the height of the taller tower.