

1) Assume that oil spilled from a ruptured tanker spreads in a circular pattern whose radius increases at a constant of 2 ft/sec. How fast is the area of the spill increasing at the exact instant the radius of the spill is 60 ft?



A 25 foot ladder leaning against a wall slips so that its base moves away from the wall at a rate of 2 ft/sec. How fast will the top of the ladder be moving down the wall when its base is 9 feet away from the wall?



A spherical balloon is to be deflated so that its radius decreases at a constant rate of 15cm/min. At what rate is the air flowing out of the balloon when its radius is 9cm?

