



- 5) A spherical balloon is inflated so that its radius increases at a rate of 4 cm/sec. How fast is the volume of the balloon increasing when the radius is 6 cm?
- 6) Water leaking onto a floor forms a circular pool. The radius of the pool increases at a rate of 4 cm/min. How fast is the area of the pool increasing when the radius is 13 cm?
- 7) A spherical snowball is rolled in fresh snow, causing it to grow so that its radius increases at a rate of 3 in/sec. How fast is the volume of the snowball increasing when the radius is 7 in?