

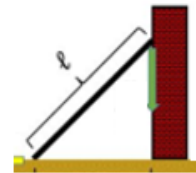
Formative Assessment #19 – Balloon and Ladder Problems


C4.1: I can solve problems involving related rates drawn from a variety of applications.

- Air is being pumped into a spherical balloon so that its volume increases at a rate of $100 \text{ cm}^3/\text{s}$. How fast is the radius of the balloon changing when its diameter is 50 cm? The equation for the volume of a sphere is $V = \frac{4}{3}\pi r^3$.



- A ladder 12 meters long leans against a wall. The foot of the ladder is pulled away from the wall at a rate of 0.50 m/min . At what rate is the top of the ladder moving down the wall when the foot of the ladder is 4 m from the base of the wall?



Code(s)	Learning Categories							 Assessed by:
C4.1	1.	EH	EL	AH	AL	NH	NL	
	2.	EH	EL	AH	AL	NH	NL	
Notes								