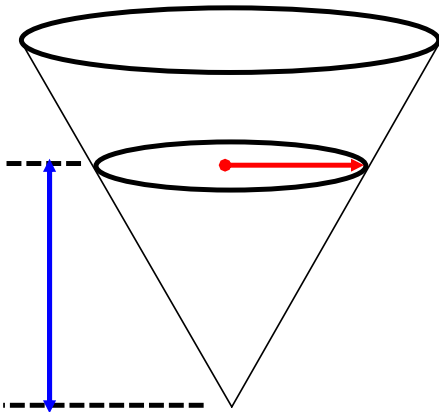
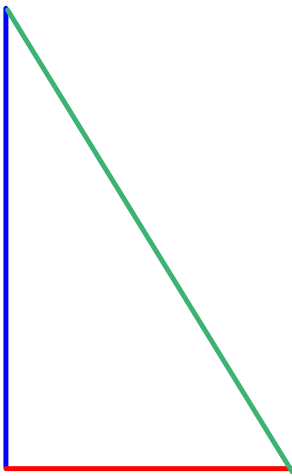


As water drains out of a cone shaped container, the height of water is changing at a rate of -0.3 feet per second, and the radius is changing at a rate of -0.1 feet per second. Find the rate of change of the volume when the radius is 4ft and the height of water is 10ft .



A 20' ladder is sliding down the side of a building so that the bottom is moving away at a rate of 2 feet per second. Find the rate of change for the top of the ladder when the bottom is 7, 15, and 24 feet away from the building. Notice that a triangle is formed by the ladder and the building. How fast is the area changing when the bottom of the ladder is 7 feet away?



Homework p.305: 25, 26, 28, 30