

Exercises:

1. Find the equation for the rate:
 - (a) The change in the surface area of a cube with respect to the change of its side length
 - (b) The change in the area of a right triangle with respect to the change of one of the non-right angles
2. Coach Lou is filling a form with concrete to create a prop for the musical. The form's inside is an equilateral triangular prism with side lengths of 4ft and a depth of 15ft. He is filling it at a rate of 1.5 cubic feet per minute. Find the equation for the height of the concrete at time t if one of the rectangular sides is flush with the ground.