

Not all of these problems or Webassign problems are related rates.

How fast something is changing is a rate with respect to time.

So read each question carefully and see if the question is rate of change with respect to time or just a rate of change with respect to some variable given.

Textbook:

32. The horizontal change is the base direction. Since it is a square base then both the sides of the base are increasing at the same rate of change. The vertical in this case is the height of the box.

43. a) find  $k$  by using  $T(1) = T(0) - 2$

b) Find time by using  $T'(t) = -1$

c) Find  $T(24)$  using the formula. Find the temperature using coroner's rule. Compare the two values.

45. You want to find the rate of change of the shoreline with respect to the angle. This is not a related rates problem.

Webassign

6a The area is the area covered on top of the water, not surface area of the cylinder of the oil.