

Errata for Calculus 1 Teacher's Guide

Test 1 Solution

Problem # 1

Part A) should be $C = .25d + 260$

Part B) should be \$635.

Part C) The y-intercept should be 260.

Part D) Fixed costs of owning a car such as insurance.

Problem #6

Part B) Was not addressed in the answer key. A graphing utility can calculate the slope of the tangent line at $t = 2$. It is 30.5489.

Problem #7

The graph is correct for the first stipulation, $2-x$ if $x < -1$. The parabola should be on the interval $[1, \infty]$ instead of the interval $[-1, 1]$. The line $y = x$ should be on the interval $[-1, 1]$ instead of the interval $[1, \infty]$. As for the limit, it does exist except where the right and left hand limits are different, namely as x approaches -1 and 1 .

Problem #8

Most of the endpoints are graphed incorrectly. $f(0)$ is undefined, but it has two closed circles $(0, 1)$ and $(0, -1)$. $f(2) = 1$, but it is graphed so that it also equals 0. As graphed, it is defined where it is undefined, and fails the vertical line test. The graph should have open circles at $(0, 1)$, $(0, -1)$, and $(2, 0)$. The only closed circle should be $(2, 1)$.

Test 2 Solution

Problem #8

Part C) Should be $-\frac{dH(s)}{ds} = \frac{d}{ds} \left(\frac{s^5}{2^5} \right) = \frac{d}{ds} \left(\frac{s^5}{32} \right) = \frac{1}{32} * 5 * s^4 = \frac{5}{32} s^4$