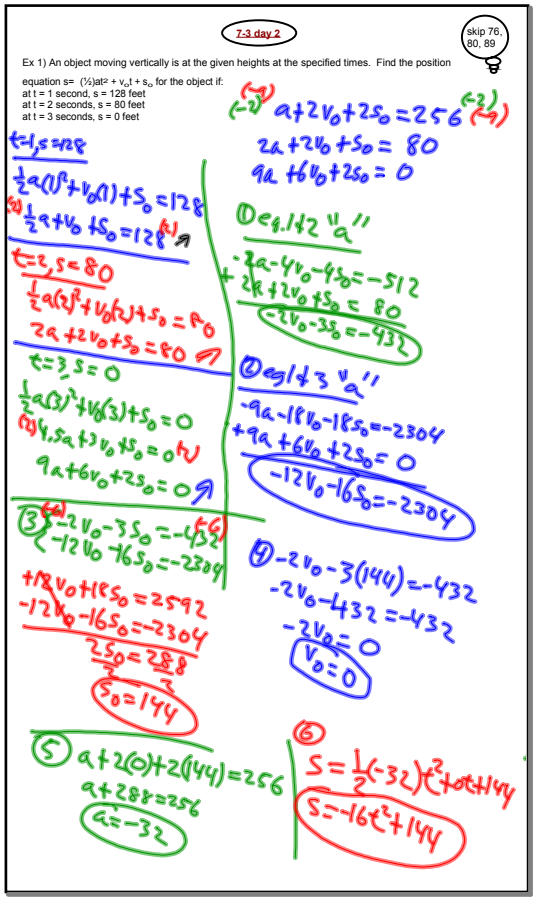
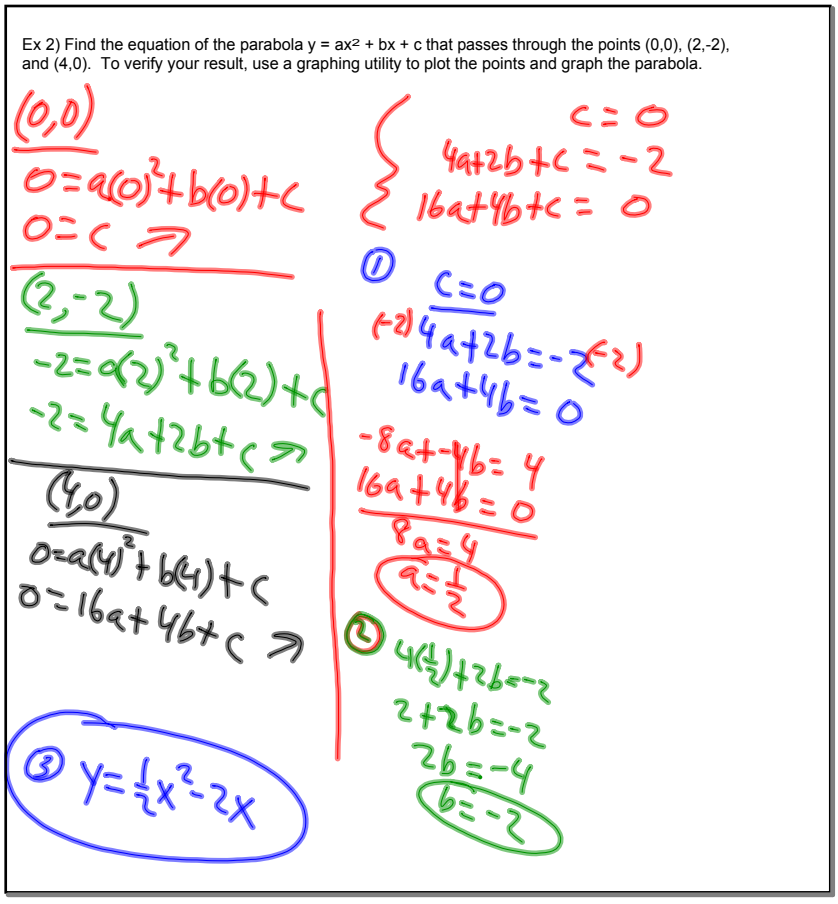

7-3 day 2
skip 76, 80, 89
Ex 1) An object moving vertically is at the given heights at the specified times. Find the position equation s= (½)at² + v₀t + s₀ for the object if:
at t = 1 second, s = 128 feet
at t = 2 seconds, s = 80 feet
at t = 3 seconds, s = 0 feet


Ex 2) Find the equation of the parabola y = ax² + bx + c that passes through the points (0,0), (2,-2), and (4,0). To verify your result, use a graphing utility to plot the points and graph the parabola.

Ex 3) **Borrowing**: A small corporation borrowed $775,000 to expand its software line. Some of the money was borrowed at 8%, some at 9%, and some at 10%. How much was borrowed at each rate if the annual interest was $67,000 and the amount borrowed at 8% was four times the amount borrowed at 10%?

x = amount at 8%

y = amount at 9%

z = amount at 10%

$x = 4z$

$x + y + z = 775{,}000$

$0.08x + 0.09y + 0.1z = 67{,}000$