

Quiz 1A, Business Calculus

Fall 2012

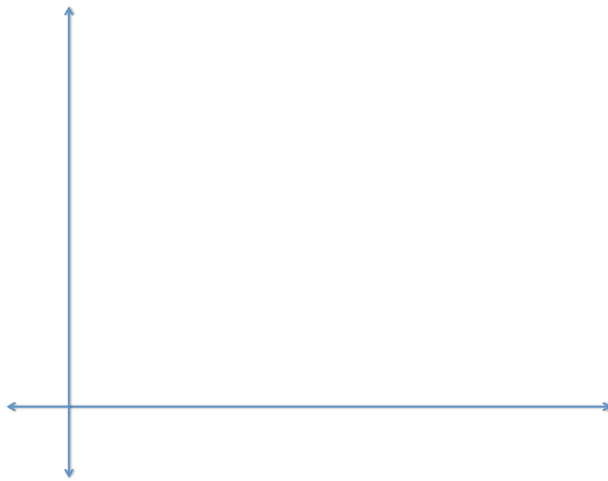
Name: _____

1. (5 points) Milk production in the U.S. (as a percent of worldwide output) is approximated by the equation

$$y = 60 + 3t$$

where t is measured in years, with $t = 0$ corresponding to 2010.

- (a) Sketch the line of the equation given above:



- (b) What will the percentage output be in 2015?

- (c) What will the percentage output be in 2030? Does this make sense? Why or why not?

2. (5 points) Simplify the expression by removing parentheses, combining like terms, factoring and canceling. If you need to use it, the quadratic formula is $\left(\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}\right)$.

$$\frac{2x^2 - 3x - (x^2 - 7x + 21)}{2x^2 - 7x + 3}$$