Quiz 3

Read all directions carefully. You must show all work to receive credit. No notes, book, calculators, mp3 players or phones are allowed during this quiz. Write clearly and make sure to indicate your final answer.

1. Simplify

(a)
$$5 + (-2)(6-1) + 7 = 5 + (-2)5 + 7 = 5 + (-10) + 7 = -5 + 7 = 2$$

(b)
$$\frac{2[5-3(-7-4)]}{2+8 \div 4} = \frac{2[5-3(-11)]}{2+2} = \frac{2[5+33]}{4} = \frac{2[38]}{4} = \frac{38}{2} = 19$$

2. (a) What is 4% of 85?

There are multiple ways to do this. One is as follows:

$$\frac{4}{100}85 = \frac{4(85)}{100} = \frac{85}{25} = \frac{17}{5} = 3 + 2/5 = 3.4.$$

Another way to do this is: 1% of 85 is 0.85, so 4% of 85 is 4(.85) = 3.4.

(b) Write 0.08% as a decimal.

To write a percentage as a decimal you replace the percent sign with a $\frac{1}{100}$ and compute. This amounts to dividing 0.08 by 100, which is the same as moving the decimal two places to the left. Thus we get 0.08% as a decimal is 0.0008.

- (a) State the slope and y-intercept of the line $y = -\frac{4}{3}x + 4$. The slope of the line is $-\frac{4}{3}$. The y-intercept of the line is 4.
- (b) Sketch the graph of the equation on the coordinate system provided.

