

Stats 1123 & 1124 – Practice Math Problems – Version 201604

1. Express the following in decimal form:

(A) $\frac{3}{7}$

(E) $\frac{9 + 4(5)}{10}$

(I) $\frac{3}{7} / \frac{4}{5}$

(B) $\frac{321}{695}$

(F) $\frac{-5 + 6}{2}$

(J) $\frac{3}{7} \cdot \frac{4}{5}$

(C) $\frac{5 - 12}{17}$

(G) 85%

(D) $\frac{9(5) + 4}{8}$

(H) 8.5%

2. Compute:

(A) 5^2

(E) $\sqrt{81}$

(I) $1/3 + 2/5$

(B) 7^2

(F) $\sqrt{25 + 81}$

(J) $\frac{3}{-4} + \frac{5}{7}$

(C) $5 \cdot 7$

(G) 85% of 20

(K) $\sqrt{9 + (4)(7)}$

(D) $\sqrt{25}$

(H) one third of 60

(L) the square of 8

3. Evaluate $y = mx+b$ using $m=5$, $x=8$, $b=4$

4. Evaluate $y = \frac{a - bx}{n}$ if $a=50$, $b=6$, $x=4$, $n=20$

5. Evaluate $y = \frac{a - bx}{n}$ if $a=50$, $b = -6$, $x=4$, $n=20$

6. Give the value of the slope and the y-intercept for the line

SLOPE

Y-INTERCEPT

(A) $Y = -2x + 10$

(B) $Y = 5 + x$

(C) $2Y + 3X - 10 = 0$

7. "X is greater than 3" can be abbreviated as " $X > 3$ ". Using the symbols $>$, $<$, \geq or \leq , write an appropriate abbreviation for each of the following:

(A) R cannot be greater than 1

(B) 9 is smaller than 10

(C) X is at least 7

(D) Z is less than -1.96

(E) Z is greater than or equal to -1.96

(F) X is more than 7

8. 30 is what percentage of 85?

9. Be familiar with the graph of a straight line

Answers: #1: 0.429, 0.462, -0.412, 6.125, 2.9, 0.5, 0.85, 0.085, 0.536, 0.343, #2: 25, 49, 35, 5, 9, 10.296, 17, 20, 0.733, -0.036, 6.083, 64 #3: 44, #4: 1.3, #5: 3.7, #6: -2 & 10, 1 & 5, -1.5 & 5. #7. $R \leq 1$, $9 < 10$; $X \geq 7$; $Z < -1.96$; $Z \geq -1.96$; $X > 7$. #8: 35.294%