Practice Math Problems for STATS 1123 & 1124, KINS 2206, PSYC 2321

1. Express the following in decimal form:

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

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

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

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

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

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

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

(G) 85%

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

(H) 8.5%

2. Compute:

(A) 5^2

(E) $\sqrt{81}$

(I) 1/3 + 2/5

(B) 7^2

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

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

(C) $5 \bullet 7$

(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 $y = \dfrac{a - bx}{n}$ if a=50, b=6, x=4, n=20

5. Evaluate $y = \dfrac{a - bx}{n}$ 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 = - X/2 + 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 >, <, ≥ or ≤, 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: -1/2 & 10, 1 & 5, -1.5 & 5. #7. R ≤ 1, 9 < 10; X ≥ 7; Z < -1.96; Z ≥ -1.96; X > 7. #8: 35.294%