

Review

**Chp 8**

1) Given the data

x	3	5	8	8
y	6	11	18	11

determine the coefficient of correlation,  $r$ .

2) Without calculating the exact value of the correlation coefficient  $r$ , can you tell whether the following data set has a positive, negative, or zero correlation coefficient?

X	-2	-3	4	7	8
Y	4	5	15	6	6

A) Positive

B) Negative

C) Zero

**Chap 9**

3) Suppose  $A = [1, 2, 3]$  and  $X = [-2, 0, 2]$ . Write  $X$  in terms of  $A$ .

4) Suppose  $r_{A,B} = -0.2$  and  $X = 3A - 1$  and  $Y = -2B + 1$ . Find  $r_{X,Y}$ .

**Chap 10**

5) Based on the following information:

Average weight = 140 pounds

SD for weight: 15 pounds

Average height = 66 inches

SD for height: 2 inches

$r=0.6$

Write the regression equation for predicting height when weight is given:

A)  $y = 4.5(x-140) + 66$

B)  $y = 4.5(x-66)+140$

C)  $y = 0.078(x-140)+66$

D)  $y = 0.078(x-66)+140$

**Chap 11**

6) The equation of the regression line for the paired data is  $y=4.3394x+6.1829$  and the standard error of estimate is  $e=1.6419$ . Approximately what percentage of  $y$  for  $x=5$  will be above 29.2098?