

Math 477 “QUIZ” for Lecture 19

NAME: (print!) \_\_\_\_\_

E-MAIL ADDRESS: (print!) \_\_\_\_\_

1. In a certain family of three boys, the Height (in centimeters) and Weights (in kilograms) are as follows

**Alex:** Height: 170cm ; Weight: 75kg

**Bob:** Height: 180cm ; Weight: 80 kg

**Charlie:** Height: 190cm ; Weight: 85kg

What is The correlation between the Height and the Weight in that family?

2. Suppose that  $Var(X) = 2$ ,  $Var(Y) = 1$ ,  $Var(X + Y) = 4$  . Find  $Var(2X + 3Y)$  .