

## D05: Psychometric Theory

### Worksheet 1:

For the next problems, assume that:

Variable	Mean	Sigma	
Verbal	500	120	
Quant	550	100	
GPA	3.0	.5	

With correlations of:

Verbal	1.0		
Quant	0.6	1.0	
GPA	0.3	0.2	1.0

- 1) For a student with a GRE Verbal of 700, what is her expected GRE Quant score?
- 2) For a student with a GRE Quant of 750, what is the expected GPA?
- 3) What is the correlation of Verbal with GPA holding Quant constant?
- 4) What is the multiple correlation of Verbal + Quant with GPA?
- 5) For a student with a Verbal of 700 and a Quant of 700, what is the expected GPA?