## QUIZ 4 - MATH 111 Your name:

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to **show neatly all your work**. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1	Use <b>elimination</b> to solve the following system <b>manually</b> :	ſ	3x + y	=	10	}.
1.	Jse eminiation to solve the following system manually.	J	2x - 5y	=	18	

- 2. Your brother is given the choice between a sales position A paying \$2500 a month and a sales position B paying \$1300 a month plus 8% commission on all monthly sales made.
  - (a) Write an equation modeling the monthly salary in position B as a function of the amount of monthly sales. State clearly the meaning of variables and units.

(b) Write an inequality reflecting when your brother would be better off taking position B rather than taking position A. Then solve it **manually** to find the amount of sales that would favor that option and leave your answer in interval notation.