

# QUIZ 1 - MATH 111

Friday, January 14

YOUR NAME:\_\_\_\_\_

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

1. The income tax  $T$  owed in a certain state is a function of the taxable income  $I$ , both measured in dollars. The formula is  $T = 0.11I - 500$ .
  - (a) Express using functional notation the tax owed on a taxable income of \$ 13,000 and then calculate its value.

- (b) If your taxable income increases from \$13,000 to \$14,000, by how much does your state tax increase?