Math 112 - Quiz 3

February 14, 2018

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) In a survey of 100 randomly selected students, 42 are taking a math class, 51 are taking an English class, and 12 are taking both. Sketch the corresponding Venn diagram.

   (a) How many students are taking a math class or an English class?

   (b) How many students are taking neither a math class nor an English class?

2. (5 points) A court record search of 250 incoming freshman at a state university shows that

   - 26 had been arrested for underage drinking but not drug possession,
   - 12 had been arrested for drug possession but not underage drinking,
   - 202 had not been arrested for either offense.

   Sketch the corresponding Venn diagram.

   (a) How many had been arrested for underage drinking?

   (b) How many had been arrested for drug possession?