Math 153 - Quiz 6

March 17, 2016

Name _____

Score _____

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

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1. (10 points) A jar contains 8 quarters, 10 dimes, and 1 nickel. Two coins are selected at random.

   (a) Sketch the complete tree diagram for this experiment. Include the probabilities of each path.

   (b) Let the random variable x represent the value (in cents) of your two-coin sample. What are the possible values of x?

   (c) Compute the probability associated with each possible value of x.

   (d) Make a table showing the probability distribution for x.

   (e) Find the mean value of x.