Quiz 7: Permutations and combinations MAT 123, Summer 2016

Name:

1. (10 points)   (a) Seven children enter a science fair. Ribbons are given for first, second, and third place. In how many different ways can these ribbons be awarded?

     (b) A jar contains four white balls and three red balls. How many ways are there to choose two red balls from the jar?

2. (10 points) (a) How many ways are there to draw two cards from a deck?

(b) How many ways are there to draw two aces?

(c) If you draw two cards from a deck, what is the probability that you draw two aces?