Quiz 5

1. Assume that the probability of a boy being born is .50. If a couple plans on having six children, find the probability that (show all your computations)

- (a) All are boys or all are girls.
- (b) One or more are boys.

(c) Exactly half are boys.

- (d) The number of boys is even (zero is an even number).
- 2. A friend proposes the following game. He is to select one card from an ordinary deck of cards. You are to pay him \$12 if he selects an ace and \$7 if he selects a 7 or a 10. What should he pay you so that the game does not favor either person (show all your computations)?