NAME: $\qquad$

## 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.
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(b) One or more are boys.
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$\qquad$
(c) Exactly half are boys.
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(d) The number of boys is even (zero is an even number).
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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)?
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