



Name _____

Date _____

Period _____

PROBABILITY OF INDEPENDENT AND DEPENDENT EVENTS

In Exercises 1-9, tell whether the events are dependent or independent. You can write a "D" or an "I". You do not have to figure out the probability for these questions.

- 1) Tossing two number cubes and getting a 3 on each one.
- 2) A box contains a nickel, a penny and a dime. Find the probability of choosing a dime first and then, without replacing the dime, choosing a penny.
- 3) Selecting a marble and then choosing a second marble without replacing the first marble.
- 4) Rolling a number cube and spinning a spinner.
- 5) Landing on heads after tossing a coin and rolling a 5 on a single 6-sided die.
- 6) Choosing a marble from a jar and landing on heads after tossing a coin.
- 7) Find the probability of drawing a jack and then a king without replacement.
- 8) Choosing a 3 from a deck of cards, replacing it, and then choosing an ace as the second card.
- 9) We have a bag containing 2 red and 2 blue balls. If we pick 2 balls out of the bag, what is the probability that the second ball is blue?

Two fair dice, one red and one blue, are rolled. Find each probability.

- 10) $P(1 \text{ and then a } 1)$
- 11) $P(\text{an even number and then a } 3)$
- 12) $P(4 \text{ and then a } 1)$
- 13) $P(\text{a number greater than } 4 \text{ and then a } 2)$
- 14) David and Anna have a coupon for a pizza with one topping. The choices of toppings are pepperoni, hamburger, sausage, onions, bell peppers, olives and anchovies. If they choose at random, what is the probability that they both choose hamburger as a topping?