NAME _____ DATE _____ PERIOD _____

Pretest

Find the total number of outcomes in each situation

1. choosing a number on a number cube and tossing a coin — 1. 12

2. choosing one meat from chicken, beef, or pork; either a baked potato or hash browns; a vegetable of either green beans, carrots, or corn — 2. 18

3. choosing either a basketball or volleyball with color choices of red, white, orange, or blue — 3. 8

A number cube is rolled. Find each probability.

4. P(even number) — 4. $\frac{1}{2}$

5. P(number less than 5) — 5. $\frac{2}{3}$

6. P(2 or 3) — 6. $\frac{1}{3}$

7. P(number greater than 1) — 7. $\frac{5}{6}$

Find the total number of possible outcomes.

8. selecting a president, vice-president, and secretary from a class of 18 students — 8. 4,896

9. the number of different ways that five people can stand in a line — 9. 120

10. the number of different ways that first and second prizes can be determined from a total of 10 participants, assuming no ties — 10. 90

State whether the events are independent or dependent.

11. tossing a coin and rolling a number cube — 11. independent

12. selecting one marble from a hat, not replacing it, and then selecting a second marble — 12. dependent

13. spinning a spinner with four equal sections and tossing a coin — 13. independent

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