

## Lesson 13 ~ Probability

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Find each probability for 1 roll of a regular number cube. Write as a fraction in simplest form.

1.  $P(2)$
2.  $P(3, 4 \text{ or } 5)$
3.  $P(8)$
4.  $P(\text{even number})$
5.  $P(\text{number less than } 3)$
6.  $P(1 \text{ through } 6)$

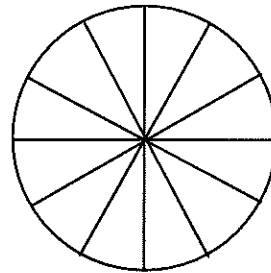
A pet is chosen at random from a shelter that has 16 dogs and 8 cats. Find each probability.

7.  $P(\text{dog})$
8.  $P(\text{cat})$
9.  $P(\text{not a cat})$
10.  $P(\text{dog or cat})$
11.  $P(\text{neither dog nor cat})$
12.  $P(\text{not a dog})$

13. Color the spinner to match the given probabilities.

$$P(\text{yellow}) = \frac{5}{12} \quad P(\text{blue}) = \frac{1}{4}$$

$$P(\text{green}) = \frac{1}{6} \quad P(\text{red}) = \frac{1}{6}$$



14. Mark and Abby played a game which required flipping a coin. Mark won when the coin landed heads and Abby won when the coin landed tails. Below is the table showing their wins.

Person	Mark	Abby
Number of Wins	10	15

- a. Find the experimental probability Mark wins.
  - b. Find the experimental probability Abby wins.
  - c. Find the theoretical probability Mark will get a win on the next flip of the coin.
15. Paul hit 4 homeruns out of 16 pitches at batting practice. Find the experimental probability he will hit a homerun on his next pitch at batting practice.