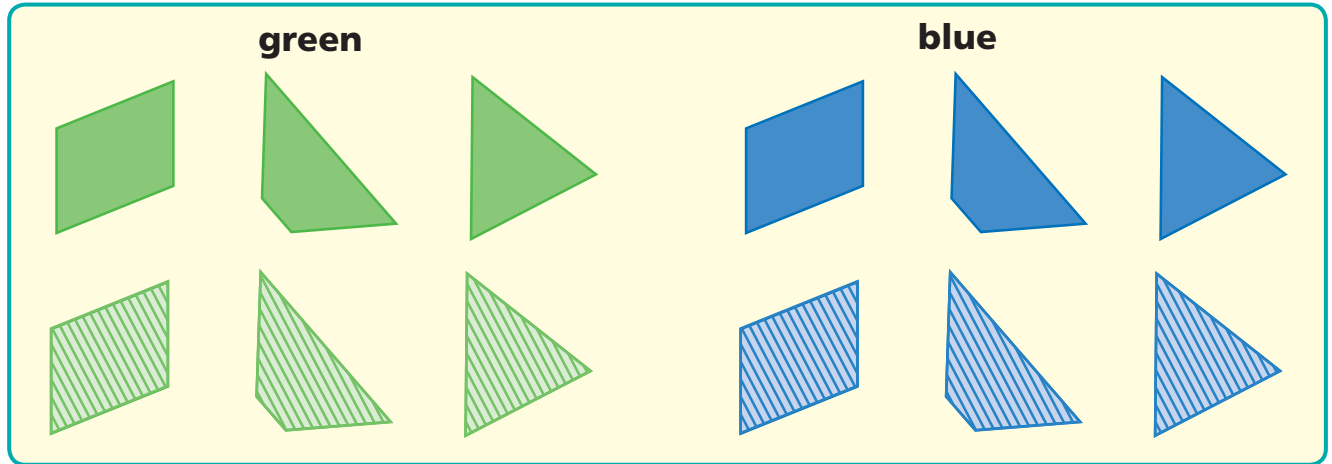


# Describing the Likelihood of an Event

NCTM Standards 1, 2, 6, 7, 8, 9, 10



1 What portion of the cards have parallelograms? \_\_\_\_\_ out of \_\_\_\_\_

Write your answer as a fraction. \_\_\_\_\_

2 What portion of the cards are blue or green? \_\_\_\_\_ out of \_\_\_\_\_

Write your answer as a fraction. \_\_\_\_\_

3 What portion of the cards are blue or solid-colored or both? \_\_\_\_\_ out of \_\_\_\_\_

Write your answer as a fraction. \_\_\_\_\_

**Label these possibilities *certain, likely, unlikely, or impossible*, using your answers to the above questions.**

4 choosing a card with a parallelogram \_\_\_\_\_

5 choosing a card that is blue or green \_\_\_\_\_

6 choosing a card that is blue or solid or both \_\_\_\_\_

Label these possibilities *certain*, *likely*, *unlikely*, or *impossible* and explain why you chose each answer.



7 The card has a striped trapezoid.

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



8 The card does not have a triangle.

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Give an example of a possibility that fits each label.

9 Impossible      The card \_\_\_\_\_

10 Likely         The card \_\_\_\_\_

11 Unlikely       The card \_\_\_\_\_

**12 Challenge** Michaela has a bag of marbles.  $\frac{1}{3}$  of the marbles are red,  $\frac{1}{6}$  of the marbles are blue, and  $\frac{1}{2}$  of the marbles are yellow.



If Michaela picks a marble without looking, what color is she most likely to pick?

\_\_\_\_\_

Explain your reasoning.

\_\_\_\_\_  
\_\_\_\_\_