Lesson 1 Multi-Step Problem Solving

Multi-Step Example

The table shows Bobby's number of hits for his entire baseball season. How much greater is the probability that Bobby hit a single or double compared to a triple or homerun? **7.SP.7, MP 1**

Ⓐ $\frac{9}{25}$

Ⓒ $\frac{11}{25}$

Ⓑ $\frac{2}{5}$

Ⓓ $\frac{18}{25}$

Result	Number of Times
Singles	41
Doubles	13
Triples	14
Homeruns	7

Use a problem-solving model to solve this problem.

1 Understand

Read the problem. Circle the information you know.
Underline what the problem is asking you to find.

2 Plan

What will you need to do to solve the problem? Write your plan in steps.

Step 1 Determine the _____ of each event.

Step 2 Combine the probabilities, then determine the _____ .

3 Solve

Use your plan to solve the problem. Show your steps.

P(single or double) = _____ P(triple or homerun) = _____

Determine the difference between the probabilities.

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

The probability of Bobby hitting a single or double is ____ greater than hitting a triple or homerun.

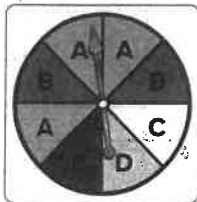So, the correct answer is ____. Fill in that answer choice.

> **Read to Succeed!**
> Add the number of favorable outcomes for each type of hit before expressing it as a fraction and determining the probability.

4 Check

How do you know your solution is accurate?

_____

_____

_____

Lesson 1 *(continued)*

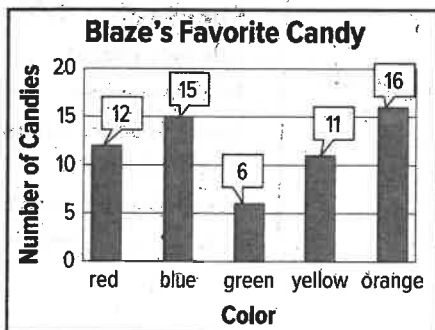**Use a problem-solving model to solve each problem.**

1 Suppose you spin the spinner one time. How much greater is the probability that the spinner will land on A compared to C or D? **7.SP.7, MP 1**


- Ⓐ 12.5%
- Ⓑ 25%
- Ⓒ 37.5%
- Ⓓ 50%

2 These six numbered squares are placed in a bag. If you randomly select one square from the bag, how much greater is the probability that you select an even number than an odd number? Express your answer as a fraction, percent, and decimal. **7.SP.7a, MP 2**

3 The bar graph shows the number of colored candies in a bag. Blaze's favorite colored candy is blue. If he chooses one candy from the bag without looking, how much greater is the probability that he will choose a green, yellow, or orange candy compared to a red or blue candy? Express your answer as a fraction, percent, and decimal. **7.SP.5, MP 2**
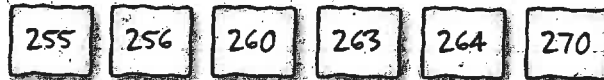
4 🔥**H.O.T. Problem** What is the probability that a randomly chosen number from 1 to 100 is *not a* multiple of 5? Express your answer as a fraction, percent, and decimal. **7.SP.5, MP 2**