

Lesson 4 Multi-Step Problem Solving

Multi-Step Example

Hakeem has a reading assignment to complete this week. He completes some of the assignment each day. By Wednesday night, he has completed two-thirds of his assignment. What fraction more of his assignment does Hakeem complete on Wednesday than on Tuesday?

7.EE.3, MP 2

- (A) $\frac{5}{12}$
- (B) $\frac{1}{12}$
- (C) $\frac{1}{3}$
- (D) $\frac{1}{4}$

Day	Total Fraction Completed
Monday	$\frac{1}{6}$
Tuesday	$\frac{1}{4}$
Wednesday	$\frac{2}{3}$

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 _____ completed on Wednesday and Tuesday.

Step 2

Determine how much more he completed _____.

3 Solve

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

$$\frac{2}{3} - \frac{1}{4} = \underline{\hspace{2cm}} \qquad \frac{1}{4} - \frac{1}{6} = \underline{\hspace{2cm}}$$

Determine how much more was completed on Wednesday.

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \qquad \text{Subtract.}$$

He completed _____ more of the assignment on Wednesday.

The correct answer is _____. Fill in that answer choice.

Read to Succeed!



The fractions in the table are cumulative, meaning they are the total fraction he has completed. It is not the fraction he completes each day.

4 Check

How do you know your solution is accurate?

Lesson 4 *(continued)*

Use a problem-solving model to solve each problem.

- 1 Over three days, a veterinarian measures the difference between a cat's weight and the weight on its first visit. What is the net weight change of the cat's weight, in pounds, from the second visit to the fourth?

7.EE.3, MP 2

Visit	Difference from Original Weight (lb)
Second	$\frac{1}{2}$
Third	$\frac{1}{5}$
Fourth	$\frac{3}{10}$

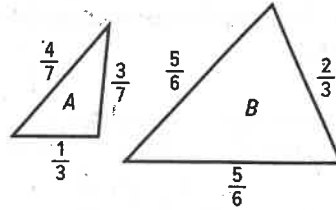
- (A) $\frac{1}{5}$
 (B) $\frac{1}{10}$
 (C) $\frac{1}{5}$
 (D) $\frac{1}{10}$

- 3 The table shows the fraction of each soccer game that Zoe spent playing goalie. On average, how much of one game did Zoe spend playing goalie? Express your answer as a decimal. 7.NS.1d, MP 1

Game	Fraction of Game as Goalie
1	$\frac{1}{4}$
2	$\frac{5}{8}$
3	$\frac{1}{2}$
4	$\frac{5}{8}$

- 2 How many units greater is the perimeter of Triangle B than the perimeter of Triangle A?

7.NS.3, MP 1



- 4 **H.O.T. Problem** The circle graph shows how Elena handles her monthly income. What fraction more does she spend or give to charity than she saves? 7.NS.3, MP 1

