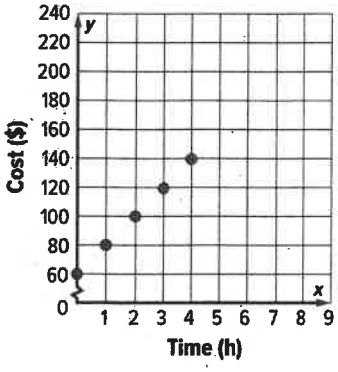
NAME _____ DATE _____ PERIOD _____

Lesson 4 Multi-Step Problem Solving

Multi-Step Example

The graph shows the amount of money customers are charged to rent a moon bounce for an event. Write an equation to represent the total cost. Then use it to determine the cost for renting the moon bounce for 8.5 hours. **7.EE.4a,** MP **4**

Ⓐ $200
Ⓑ $220
Ⓒ $230
Ⓓ $240



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 cost per _____ to rent the moon bounce.

Step 2 Determine the _____ for 8.5 hours.

Read to Succeed!

The cost for 0 hours is $60. This must mean there is a rental fee plus an hourly rate to rent the moon bounce.

3 Solve

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

There is a _____ rental fee and the rate of change is _____.

____ $h + 60 = t$ Let h represent hours and t represent total cost.

____ $(8.5) + 60 = t$ Replace h with 8.5.

_____ $= t$

The cost for renting the moon bounce for 8.5 hours is _____.

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

4 Check

How do you know your solution is accurate?

_____

_____

_____

NAME _____ DATE _____ PERIOD _____

Lesson 4 *(continued)*

Use a problem-solving model to solve each problem.

1 An electrician charges his customers an hourly rate plus a service fee of $30. The table shows the amount of money the electrician earned from his last four customers. What equation represents a customer's charge, C, for x hours of service? **7.EE.4a,** MP **4**

Customer	Hours	Charge ($)
Smith	3	94.50
Jones	2	73.00
Travers	6	159.00
Johnson	7	180.50

Ⓐ $C = 30x + 21.50$

Ⓑ $C = 21.50x + 30$

Ⓒ $C = 25.50x + 30$

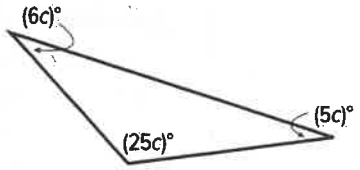
Ⓓ $C = 30x + 25.50$

2 Valerie works at a local amusement park. She earns $9.80 per hour. She is also paid $7.00 for meals and $3.00 for transportation each day. Last Friday, Valerie earned $88.40. Write and solve an equation to determine how many hours Valerie worked on Friday. **7.EE.4a,** MP **2**

_____

_____

3 Write and solve an equation to determine the measures of the angles in the triangle below. **7.EE.4a,** MP **4**



_____

4 **H.O.T. Problem** A seventh grade class is playing a game of *Guess My Rule*. As a student makes a guess, the teacher tells what number the rule gives back. Is it possible for a student to guess 10 with the teacher response being 3? Write a two-step equation that describes the rule to justify your answer. **7.EE.4a,** MP **3**

Student Guess (x)	Teacher Response (y)
2	−1
5	8
0	−7
6	11

_____

_____

_____

_____