

Lesson 1 Multi-Step Problem Solving

Multi-Step Example

Makayla and her friends earn money by babysitting after school. At the end of one week, they deposit their weekly earnings at the bank. Which friend earns the most money per hour babysitting? **7.RP.2b, MP 2**

- (A) Makayla (C) Jason
(B) Gael (D) Cecilia

Name	Hours Worked	Deposit Amount (\$)
Makayla	15	138.75
Gael	13	136.50
Jason	16	168.00
Cecilia	9	101.25

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 Calculate the _____ for each person.

Step 2 Compare the unit rates to determine _____ earns the most.

3 Solve

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

Makayla: $\$138.75 \div 15 =$ _____ per hour

Gael: $\$136.50 \div 13 =$ _____ per hour

Jason: $\$168 \div 16 =$ _____ per hour

Cecilia: $\$101.25 \div 9 =$ _____ per hour

_____ earns _____ per hour, which is the greatest unit rate.

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

4 Check

How do you know your solution is accurate?

Read to Succeed!



Be sure to calculate each unit rate. Do not assume that a lower deposit amount will result in a lower unit rate.

Lesson 1 *(continued)*

Use a problem-solving model to solve each problem.

- 1 An automobile magazine compared the gas mileage for new cars. The distance traveled and amount of gasoline used for each car is shown in the table: Which car had the greatest gas mileage(miles per gallon)?

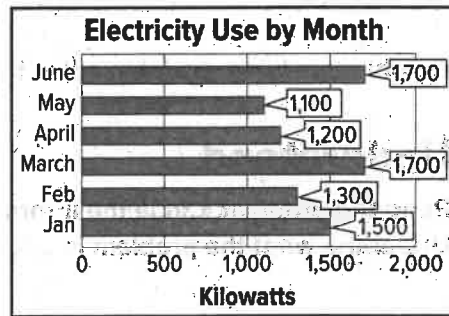
7.RP.2b, MP 2

Car	Distance (mi)	Gasoline (gal)
Car A	650	20
Car B	426	12
Car C	515	15
Car D	280	8

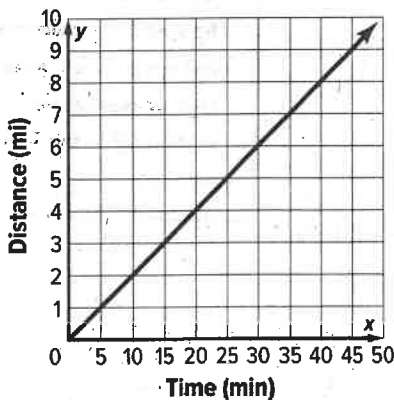
- (A) Car A
- (B) Car B
- (C) Car C
- (D) Car D

- 2 The graph shows the amount of electricity used by one household over six months. If the cost per kilowatt hour usage is \$0.12, approximately how much would it cost per day for the month of April? (*Hint: There are 30 billable days in the month of April.*)

7.RP.2b, MP 1



- 3 The graph shows the first 45 minutes of Darlene's bike trip. If she continues at a constant rate, how far will she travel in two hours? 7.RP.2, MP 7



- 4 **H.O.T. Problem** Kai can run 100 meters in 12.5 seconds and Josalin can run 150 meters in 20 seconds. If they both ran a 400-meter race at this rate, how many meters ahead would Kai cross the finish line before Josalin? 7.RP.2, MP 4