

Additional Practice 6-6

Make Sense and Persevere

Another Look!

A museum director would like to display butterflies and dragonflies in 5 cases with about the same number of insects in each case. How many insects should go in each case?

Identify the hidden questions.

- How many butterflies are there?
- How many insects are there?

Write and solve equations to solve the hidden questions and the main question.

Let b = the number of butterflies.

$$b = 3 \times 36, b = 108 \text{ butterflies.}$$

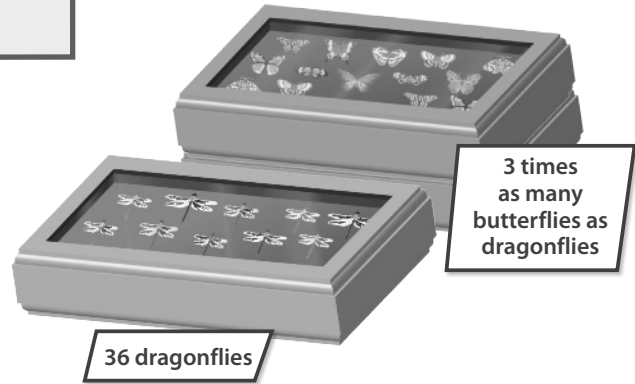
Let i = the number of insects.

$$i = 36 + 108, i = 144 \text{ insects}$$

Let c = the number of cases.

$$c = 144 \div 5, c = 28 \text{ R}4$$

28 insects should go in one display case and 29 insects should go in each of the other 4 cases.

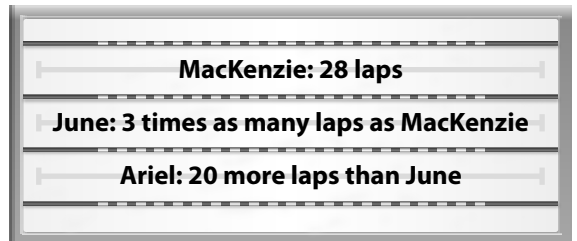


You can make sense of problems by finding the hidden questions.



Make Sense and Persevere

The diagram shows how many laps three friends swim each week. How can you determine the number of miles Ariel swam?



8 laps equal a mile

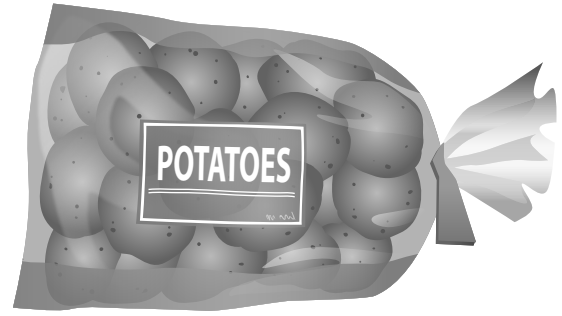
1. Write the hidden question(s) you need to answer before you answer the original question. Use equations to solve.
2. Use your answers to the hidden question(s) and an equation to determine how many miles, m , Ariel swam.



Performance Task

Selling Potatoes

Ms. Sackstader owns a grocery store. She buys 272 pounds of potatoes for \$99. She wants to sell them for twice as much. She makes 9 bags containing 10 pounds each and puts the rest in 5-pound bags. Her family will eat any of the leftover potatoes. Ms. Sackstader wants to know how many 5-pound bags of potatoes she can sell.



3. **Make Sense and Persevere** What hidden questions do you need to answer first? Use equations to solve each.

 MP.1.1

Each 5-pound bag of potatoes sells for \$4.

Be sure to tell what each variable represents.

4. **Model with Math** How many 5-pound bags of potatoes can Ms. Sackstader sell? Use equations to solve. Explain your answer.

 4.OA.1.3, MP.4.1



5. **Be Precise** How much money will Ms. Sackstader make for the 5-pound bags? Write and solve an equation to show how to solve.

 4.OA.1.2, MP.6.1