

Homework & Practice 3-10

Model with Math

Another Look!

A hardware store ordered 4 packs of large screws and 5 packs of smaller screws from a supplier. Each pack contains 150 screws. How many screws did the store order?

Tell how you can model with math.

- I can use bar diagrams and equations to represent and solve this problem.
- I can use previously learned concepts and skills.

When you **model with math**, you use pictures and objects to show how the quantities in the problem are related.

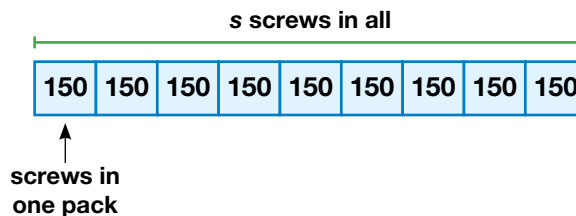
Draw a bar diagram and write an equation to solve.

$$4 + 5 = 9 \text{ packs}$$

$$9 \times 150 = s$$

$$s = 1,350$$

The store ordered 1,350 screws.



© MP.4 Model with Math

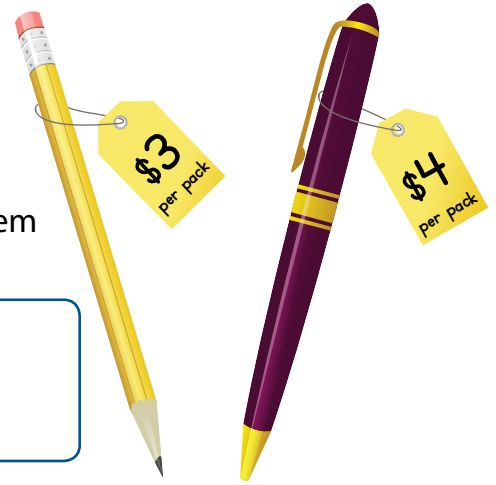
When Mary was born, she weighed 8 pounds. When she was 10 years old, she weighed 10 times as much. How much more did Mary weigh when she was 10 years old than when she was born? Use Exercises 1–2 to answer the question.

1. Draw a picture, write and solve an equation to find Mary's weight, w , when she was 10 years old.

2. Draw a picture, and write and solve an equation to find the difference, d , between Mary's weight when she was 10 years old and when she was born.

School Supplies

A bookstore ordered 1,528 packs of pens and 1,823 packs of pencils at the prices shown. How much did the bookstore spend on pens?



3. **MP.1 Make Sense and Persevere** Have you seen a problem like this before? Explain.

4. **MP.2 Reasoning** What do the numbers that you need to use in the problem mean?

5. **MP.4 Model with Math** What operation can you use to solve the problem? Draw a bar diagram to show the operation.

6. **MP.5 Use Appropriate Tools** Would place-value blocks be a good tool to use to solve the problem? Explain.

7. **MP.6 Be Precise** What was the total cost of the pens? Show that you computed accurately.

8. **MP.2 Reasoning** Explain why your answer makes sense.

When you **model with math**, you use math you already know to solve a problem.

