

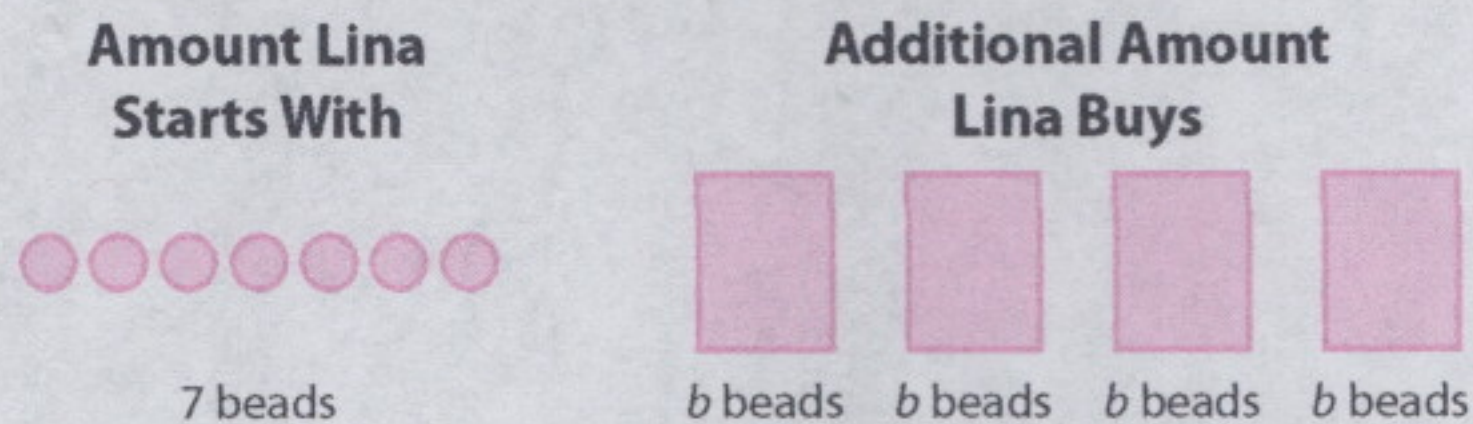
Write and Evaluate Expressions

Study the example showing how to write and evaluate expressions. Then solve problems 1–7.

Example

Lina is making jewelry. She has 7 beads and buys 4 additional packets of beads that each have the same number of beads. Write an expression to show the total number of beads that Lina uses.

Draw the beads she starts with and the packets she buys, and label the number of beads in each. You don't know how many beads are in each packet, so use a variable like b to label the number of beads in each packet.



1 Write an expression for each word or phrase.

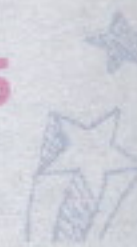
a. the number of beads Lina starts with

b. the total number of beads in the four packets

c. the total number of beads Lina has

2 Laura wrote and solved the following expression to find the total number of beads Lina has if there are 6 beads in each packet. Find and correct Laura's mistake.

$$\begin{aligned}
 7 + 4b &= 11b \\
 &= 11(6) \\
 &= 66
 \end{aligned}$$



Solve.

3 Blake and three friends meet for lunch. His friends all get the same thing, but Blake gets a different lunch that costs \$6. Write an expression to show the total amount that Blake and his friends spend. Then find the total amount that Blake and his friends spend if each friend spends \$8.

4 Ana's age is 8 years less than 4 times her sister's age. Write an expression for Ana's age. How old is Ana if her sister is 5 years old?

5 Belle put the muffins she baked on six plates, four of which are red and two of which are yellow. The four red plates each have 5 muffins. The two yellow plates each have the same number of muffins. Write an expression for the total number of muffins Belle baked. If each yellow plate has 8 muffins, find how many muffins Belle baked in all. Explain.

6 Adam says that the expression $52 - 3y$ is equal to 20 when $y = 2$. Explain why Adam's answer is incorrect.

7 A blue suitcase weighs 10 pounds less than three-fourths the weight of a green suitcase. Write an expression that you can use to find the weight of the blue suitcase. Then explain how you can find the total weight of both suitcases if the green suitcase weighs 36 pounds.
