Variables

In this lesson, we will practice evaluating expressions with variables.

Andrew needs twice the amount of time to read a novel than Billy does. What is an expression to represent the amount of time Andrew needs? How much time does Andrew need if Billy needs 4 hours?

First, set up an expression for the number of hours. The amount of time it takes Billy to read a book depends on the length of the book. Use $t$ to represent the time variable. Andrew needs twice the amount of time. $2t$ (2 times $t$).

Solution: The correct expression is $2t$. If Billy needs 4 hours, then Andrew needs $2 \times 4$ hours or 8 hours.

Evaluate each expression.

1. $a - 3$ when $a = 5$ _______
2. $3 \times s$ when $s = 4$ _______
3. $u + 2 - 8$ when $u = 10$ _______
4. $p - 10$ when $p = 20$ _______
5. $8 \div t$ when $t = 2$ _______
6. $b \times b$ when $b = 6$ _______

Writing Math  Jessica is counting the number of gumballs in a gumball machine with only red and blue gumballs. She knows that there are 25 blue gumballs, but she does not know the total. Using the total as a variable, what expression could she write for the number of red gumballs? If there are 75 gumballs in total, how many are red? Explain how you know.