

Lesson 6-5 • Group 2

Reinforce Understanding

6.5 Small Group • Group 2

I can write an algebraic expression for a real situation and evaluate it for a given value of the variable, explain what each part stands for, and build one for a situation I have not seen before.

Worked model

A club buys a \$14 shirt for each member and pays one \$35 setup fee. Write an expression for the total cost.

1. Name the unknown. Let m = the number of members.
2. Write the part that changes. \$14 for each member $\rightarrow 14m$
3. Write the part that stays the same. one-time fee $\rightarrow 35$
4. Join them with the operation the story needs. $14m + 35$

Answer: The expression is $14m + 35$, where m stands for the number of members.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Match each word phrase to its correct algebraic expression.

Write the name of the correct group on each line.

Groups: Correctly Matched

- _____ twice a number $k \rightarrow 2k$
- _____ a number b divided by 5 $\rightarrow b \div 5$
- _____ the sum of a number d and 15 $\rightarrow d + 15$
- _____ 10 decreased by a number $r \rightarrow 10 - r$
- _____ 4 more than triple a number $c \rightarrow 3c + 4$
- _____ half of a number $h \rightarrow h \div 2$

2. Match each word phrase to its algebraic expression.

Write the letter of the matching item on each line.

1. _____ the product of 5 and n
2. _____ 8 less than a number w
3. _____ a number p increased by 12
4. _____ twice a number x , plus 3
5. _____ a number y divided by 4
6. _____ 7 more than a number z

- A $5n$
- B $w - 8$
- C $p + 12$
- D $2x + 3$
- E $y \div 4$
- F $z + 7$