

Name _____

Date _____

Writing and Evaluating Expressions—Addition and Subtraction

Kathleen lost a tooth today. Now she has lost 4 more than her sister Cara lost.

1. Write an expression to represent the number of teeth Cara has lost. Let K = the number of teeth Kathleen lost.

Expression:

2. Write an expression to represent the number of teeth Kathleen has lost. Let C = the number of teeth Cara lost.

Expression:

3. If Cara lost 3 teeth, how many teeth has Kathleen lost?

1. Read the story problem. Identify the unknown quantity and write an addition or subtraction expression that is described. Finally, evaluate your expression using the information given in column four.

Story Problem	Description with Units	Expression	Evaluate the Expression If:	Show Your Work and Evaluate
Sammy has two more baseballs than his brother Ethan.	Let e = the number of balls Ethan has	$e + 2$	Ethan has 7 baseballs.	$e + 2$ $7 + 2$ 9 Sammy has 9 baseballs.
Ella wrote 8 more stories than Anna in the fifth grade.			Anna wrote 10 stories in the fifth grade.	
Lisa has been dancing for 3 more years than Danika.			Danika has been dancing for 6 years.	
The New York Rangers scored 2 fewer goals than the Buffalo Sabres last night.			The Rangers scored 3 goals last night.	
George has gone camping 3 times fewer than Dave.			George has gone camping 8 times.	

2. If George went camping 15 times, how could you figure out how many times Dave went camping?

Kathleen lost a tooth today. Now she has lost 4 more than her sister Cara lost.

- Write an expression to represent the number of teeth Cara has lost. Let K = the number of teeth Kathleen lost.

Expression: $K - 4$

- Write an expression to represent the number of teeth Kathleen lost. Let C = the number of teeth Cara lost.

Expression: $C + 4$

- If Cara lost 3 teeth, how many teeth has Kathleen lost?

$C + 4$; $3 + 4$; *Kathleen has lost 7 teeth.*

- Read each story problem. Identify the unknown quantity, and write an addition or subtraction expression that is described. Finally, evaluate your expression using the information given in column four.

Sample answers are shown. An additional expression can be written for each.

Story Problem	Description with Units	Expression	Evaluate the Expression If:	Show Your Work and Evaluate
Sammy has two more baseballs than his brother Ethan.	Let e = the number of balls Ethan has	$e + 2$	Ethan has 7 baseballs.	$e + 2$ $7 + 2$ 9 Sammy has 9 baseballs.
Ella wrote 8 more stories than Anna in the fifth grade.	<i>Let s = the number of stories Anna wrote in fifth grade</i>	$s + 8$	Anna wrote 10 stories in the fifth grade.	$s + 8$ $10 + 8$ 18 <i>Ella wrote 18 stories in fifth grade.</i>
Lisa has been dancing for 3 more years than Danika.	<i>Let y = the number of years Danika has been dancing</i>	$y + 3$	Danika has been dancing for 6 years.	$y + 3$ $6 + 3$ 9 <i>Lisa has been dancing for 9 years.</i>
The New York Rangers scored 2 fewer goals than the Buffalo Sabres last night.	<i>Let g = the number of goals scored by the Rangers</i>	$g + 2$	The Rangers scored 3 goals last night.	$g + 2$ $3 + 2$ 5 <i>The Buffalo Sabres scored 5 goals last night.</i>
George has gone camping 3 times fewer than Dave.	<i>Let c = the number of times George has gone camping</i>	$c + 3$	George has gone camping 8 times.	$c + 3$ $8 + 3$ 11 <i>Dave has gone camping 11 times.</i>

- If George went camping 15 times, how could you figure out how many times Dave went camping?

Adding 3 to George's camping trip total (15) would yield an answer of 18 trips for Dave.