LESSON MAKER PRO

Expression Explorer

Write, read, and evaluate number rules.

GRADE 6 · 6.EE.A.2

CCSS.Math.Content.6.EE.A.2 "Write, read, and evaluate expressions in which letters stand for numbers."

NAME _____ DATE _____

LETTERS STAND FOR NUMBERS

A letter in an expression stands for a number that can change. To evaluate an expression, replace the letter with its value, then use the order of operations.

WORKED EXAMPLE

Evaluate 5n - 2 when n = 8.

1. Replace n with 8: 5(8) - 2
2. Multiply: 40 - 2
3. Subtract: 38

Answer: 38

PRACTICE 6 problems

1 Write an expression for 9 more than a number k.

ANSWER _____

2 Write an expression for the product of 7 and t.

ANSWER _____

3 Read the expression 12p in words.

ANSWER _____

4 Evaluate 6m + 1 when m = 7.

ANSWER _____

5 Evaluate q / 10 + 9 when q = 20.

ANSWER _____

6 Write a phrase that matches 15 - d.

ANSWER _____

APPLY IT Show your work

1 In a video game, you begin with 12 gems and earn 6 gems for each level you finish. Write an expression for your total number of gems after l levels. Then find the total after 7 levels.

WORK SPACE

ANSWER _____

2 A custom phone case costs $10 plus $9 for each sticker pack you add. Write an expression for the cost of p sticker packs. Then find the cost of 6 sticker packs.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Evaluate 16 + 7n when n = 6. Explain why you multiply before you add.

WORK SPACE AND ANSWER

ANSWER KEY

Expression Explorer

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write an expression for 9 more than a number k.	**k+9**
2	Write an expression for the product of 7 and t.	**7t**
3	Read the expression 12p in words.	**12 times p**
4	Evaluate 6m + 1 when m = 7.	**43**
5	Evaluate q / 10 + 9 when q = 20.	**11**
6	Write a phrase that matches 15 - d.	**15 minus d**

PART 2 · APPLY IT

1. **12 + 6l; 54 gems** Use 12 + 6l because there are 12 starting gems and 6 more gems per level. Substitute 7 for l: 12 + 6(7) = 54.
2. **10 + 9p; $64** Use 10 + 9p because the case has a $10 base cost and each pack costs $9. Substitute 6 for p: 10 + 9(6) = 64.

CHALLENGE

58; Multiplication comes before addition, so 7(6) = 42 and 16 + 42 = 58.

Accept equivalent expressions with factors in a different order, such as t x 7 for 7t. For reading and phrase items, accept clear equivalent wording.