LESSON MAKER PRO

Plug In Power

Replace x, then calculate.

GRADE 6 · 6.PAR.6.4

6.PAR.6.4 "Evaluate expressions when given values for the variables, including expressions that arise in everyday situations."

NAME _____ DATE _____

EVALUATE EXPRESSIONS

To evaluate an expression, replace x with its given value. Then use the order of operations to find one numerical value.

WORKED EXAMPLE

Evaluate $3x + 8$ when $x = 7$.

1. Replace x with 7: 3(7) + 8
2. Multiply: 21 + 8
3. Add: 29

Answer: 29

PRACTICE 6 problems

1 Evaluate 5x + 6 when x = 4.

ANSWER _____

2 Evaluate 19 - 2x when x = 5.

ANSWER _____

3 Evaluate x/2 + 9 when x = 10.

ANSWER _____

4 Evaluate 4(x + 2) when x = 6.

ANSWER _____

5 Evaluate 30 - x/5 when x = 10.

ANSWER _____

6 Evaluate 6x - 11 when x = 9.

ANSWER _____

APPLY IT Show your work

1 A gaming center charges a $12 entry fee and $5 for each hour. The cost is 12 + 5x, where x is the number of hours. Find the cost when x = 6.

WORK SPACE

ANSWER _____

2 A music app gives 30 points for joining a challenge and 4 points for each song reviewed. The total is 30 + 4x, where x is the number of songs reviewed. Find the total when x = 5.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Evaluate 2(x + 5) - 4 when x = 9. Show your substitution and order of operations.

WORK SPACE AND ANSWER

ANSWER KEY

Plug In Power

GRADE 6 · 6.PAR.6.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Evaluate 5x + 6 when x = 4.	**26**
2	Evaluate 19 - 2x when x = 5.	**9**
3	Evaluate x/2 + 9 when x = 10.	**14**
4	Evaluate 4(x + 2) when x = 6.	**32**
5	Evaluate 30 - x/5 when x = 10.	**28**
6	Evaluate 6x - 11 when x = 9.	**43**

PART 2 · APPLY IT

1. **$42** Substitute 6 for x: 12 + 5(6) = 42.
2. **50 points** Substitute 5 for x: 30 + 4(5) = 50.

CHALLENGE

24

Accept correct substitution work and equivalent calculation steps. Answers should include units for the word problems.