

Expressions & One-Step Equations

Fill in each part when its number appears on the slide.

PART 1 • TARGET

I can write and evaluate expressions and solve one-step equations using inverse operations.

PART 2 • WARM-UP

1. Evaluate: $3 + 4 \times 2$.

Key: 11 (multiply first).

2. A number plus 7 equals 15. What is the number? How did you figure it out?

Key: 8. I subtracted 7 from 15.

3. Write a word phrase for $n + 5$.

Key: Examples: 5 more than a number; a number increased by 5.

PART 3 • PREDICTION

I multiplied a number by 4 and got 36. What was my number?

Circle one: ☐ 8 ☐ 9 ☐ 32

PART 4 • VOCABULARY

Word	Meaning
Variable	A letter that stands for an unknown number.
Expression	Numbers, variables, and operations with no equal sign ($3x + 2$).
Equation	A statement that two expressions are equal ($3x + 2 = 11$).
Coefficient	The number multiplied by a variable (the 3 in $3x$).

PART 5 • WORDS TO EXPRESSIONS

"3 LESS THAN N" is written $n - 3$, not $3 - n$.

Check: Which expression means "4 less than a number"?

Circle one: (A) $n + 4$ (B) $n - 4$ (C) $4 - n$ (D) $4n$

Key: (B) $n - 4$. Start with n , then take away 4.

PART 6 • EVALUATE

To EVALUATE, substitute the value and follow the ORDER OF OPERATIONS.

Check: Evaluate $4(x - 2)$ when $x = 7$.

Answer: _____

Key: 20. $4 \times 5 = 20$.

PART 7 • EQUIVALENT EXPRESSIONS

Combine LIKE TERMS. The DISTRIBUTIVE property: $3(x + 2) = 3x + 6$.

Check: Which is equivalent to $2(x + 5)$?

Circle one: (A) $7x$ (B) $2x + 10$ (C) $2x + 5$ (D) $x + 10$

Key: (B) $2x + 10$. Multiply both terms by 2.

PART 8 • SOLVE WITH BALANCE

Use INVERSE OPERATIONS and do the same to BOTH SIDES.

Check: Solve: $x + 4 = 10$

Answer: _____

Key: 6. Subtract 4 from both sides.

PART 9 • WORKED EXAMPLE

1. Problem: $x + 7 = 15$.
2. Step 1: x has 7 added to it.
3. Step 2: Undo +7 by subtracting 7 from BOTH sides: $x + 7 - 7 = 15 - 7$.
4. Step 3: $x = 8$.
5. Check: $8 + 7 = 15$ (correct)

PART 10 • WE DO

Solve and check: $5x = 45$.

Answer: $x = 9$

PART 11 • YOU DO

Solve: $y \div 6 = 7$

Answer: _____

Key: 42. Multiply both sides by 6: $y = 42$.

PART 12 • WORK TIME: THE VARIABLE VILLAIN

Write each code piece as you earn it: File 1: T File 2: E File 3: R File 4: M File 5: S

Final code: TERMS

PART 13 • WRAP-UP

Was your prediction in Part 3 right? One thing I learned today:

Key: Examples: 5 more than a number; a number increased by 5.