

ARE YOU READY?

✓ Vocabulary

Match each term on the left with a definition on the right.

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|------------------------|--|
| 1. constant | A. a mathematical phrase that contains operations, numbers, and/or variables |
| 2. expression | B. a mathematical statement that two expressions are equivalent |
| 3. order of operations | C. a process for evaluating expressions |
| 4. variable | D. a symbol used to represent a quantity that can change |
| | E. a value that does not change |

✓ Order of Operations

Simplify each expression.

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|---------------------|-----------------------------|
| 5. $(7 - 3) \div 2$ | 6. $4 \cdot 6 \div 3$ |
| 7. $12 - 3 + 1$ | 8. $2 \cdot 10 \div 5$ |
| 9. $125 \div 5^2$ | 10. $7 \cdot 6 + 5 \cdot 4$ |

✓ Add and Subtract Integers

Add or subtract.

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|----------------|------------------|----------------|------------------|
| 11. $-15 + 19$ | 12. $-6 - (-18)$ | 13. $6 + (-8)$ | 14. $-12 + (-3)$ |
|----------------|------------------|----------------|------------------|

✓ Add and Subtract Fractions

Perform each indicated operation. Give your answer in the simplest form.

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|---------------------------------|----------------------------------|---------------------------------|---------------------------------|
| 15. $\frac{1}{4} + \frac{2}{3}$ | 16. $1\frac{1}{2} - \frac{3}{4}$ | 17. $\frac{3}{8} + \frac{2}{3}$ | 18. $\frac{3}{2} - \frac{2}{3}$ |
|---------------------------------|----------------------------------|---------------------------------|---------------------------------|

✓ Evaluate Expressions

Evaluate each expression for the given value of the variable.

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|---------------------------|--------------------------|
| 19. $2x + 3$ for $x = 7$ | 20. $3n - 5$ for $n = 7$ |
| 21. $13 - 4a$ for $a = 2$ | 22. $3y + 5$ for $y = 5$ |

✓ Connect Words and Algebra

23. Janie bought 4 apples and 6 bananas. Each apple cost \$0.75, and each banana cost \$0.60. Write an expression representing the total cost.
24. A rectangle has a width of 13 inches and a length of ℓ inches. Write an expression representing the area of the rectangle.
25. Write a phrase that could be modeled by the expression $n + 2n$.