

## LESSON

**Practice B****1-6****Order of Operations**

Simplify each expression.

1.  $18 - 12 + 4^2$

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2.  $5 \cdot 3 + 2(4)$

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3.  $-2[7 + 6(3 - 5)]$

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4.  $-7 - (2^4 \div 8)$

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5.  $-6 \cdot 3 + |-3(-4 + 2^3)|$

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6.  $\frac{-16 + 4}{2(\sqrt{13} - 4)}$

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Evaluate each expression for the given value of the variable.

7.  $3 - y^2 + 7$  for  $y = 5$

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8.  $-3(x + 12 \cdot 2)$  for  $x = -8$

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9.  $(m + 6) \div (2 - 5)$  for  $m = 9$

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10.  $-5t + 12 - \frac{1}{2}t$  for  $t = -10$

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Translate each word phrase into a numerical or algebraic expression.

11. the product of 6 and the sum of 3 and 20

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12. the absolute value of the difference of  $m$  and  $-15$ 

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13. the quotient of  $-18$  and the sum of  $-2$  and  $d$ 

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Degrees Fahrenheit  $F$  can be converted to degrees Celsius  $C$  using the expression  $\frac{5}{9}(F - 32)$ . Degrees Celsius can be converted to degrees Fahrenheit using the expression  $\frac{9}{5}C + 32$ .

14. The hottest recorded day in Florida history was  $109^\circ F$ , which occurred on June 29, 1931 in Monticello. Convert this temperature to degrees Celsius. Round your answer to the nearest tenth of a degree.

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15. The coldest recorded day in Florida history was about  $-18.9^\circ C$ , which occurred on February 13, 1899 in the city of Tallahassee. Convert this temperature to degrees Fahrenheit. Round your answer to the nearest tenth of a degree.

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