

LESSON

1-6

Practice B

Order of Operations

Simplify each expression.

1. $18 - 12 + 4^2$

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

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

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

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

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

Evaluate each expression for the given value of the variable.

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

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

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

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

Translate each word phrase into a numerical or algebraic expression.

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

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

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

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.

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.
