

NAME _____

DATE _____

Module 1 Getting Ready for Algebra
Lesson 5 Applying the Order of Operations

independent practice

Simplify each expression.

1. $|-12| - 5 + 7(-3)$

2. $9(-3) - |-5 - 3|$

3. $7(3 - 9) + 12 \div (-4)$

4. $24 \div 6 - 2(-1 - 7)$

5. $-3^2 + 3^3 + (-3)$

6. $-2 + 2^3 - 2^2$

7. $4^3 - 5(3 + 7 - |1|)$

8. $3|2(5 + 3) - 7| \div (-3)$

9. $-\frac{74}{2} + \frac{36}{4} - \frac{19}{19}$

10. $\frac{22}{11} + \frac{10}{5} - \frac{15}{3}$

11. $\frac{\sqrt{1^2 - 4 \cdot 1 \cdot (-6)}}{2 \cdot 1}$

12. $\frac{\sqrt{6^2 - 4 \cdot 1 \cdot 9}}{2 \cdot 9}$

13. $\frac{-26 + 4 \cdot (-6)}{5^2}$

14. $\frac{-5 + 7 \cdot 3 \cdot 5}{10^2}$

15. $(81 \div 3^2) + (7^2 - 9)$

16. $(-8 - 17)^2 \div 5 - 3$

17. $(-4 - 9)^2 \div (-13) + (5 + 8)$

18. $9(3 - 5) \div 3^2$

19. $(-5 + 2)^2 \div (7 + 2)$

20. $(-7 + 2)^2 \div 5 + 2$

21. $-5^2 - (-2 - 3)^2$

22. $12 - 4(6) - 12 \div 2^2$

23. $7|3 - 5(2 + 1) - 9| - 47$

24. $|3(-5)|^2 + 3(-4)^2$

25. $3|-7 - 4| \div 3 + \sqrt{49}$

26. $-120 \div 30 \div 4 + 7 - 15 \div 5$

27. $3^3 + |-9 - 3| + 18 \div 3$

28. $(-4)^2 - 3[2|-3| - 5] + 7$

29. $[(-2 - 6)^2 \div 2] - (5)(-2)$

30. $75 \div 3 + 7(2|-4| + 2) \div 10$

Journal

1. What does “Please **E**xcuse **M**y **D**ear **A**unt **S**ally” have to do with the order of operations?
2. Show an example in which addition is done before multiplication.
3. How do you know whether to perform addition or subtraction first? What about multiplication or division?
4. What are “grouping symbols” and what do they indicate in the order of operations? How do you evaluate an expression that has grouping symbols within other grouping symbols?
5. Why is it necessary to have an order of operations?

Cumulative Review

Simplify, if possible.

1. $\frac{-36}{9}$

2. $12(-6)$

3. $52 + (-71)$

4. $\frac{-2}{3} + \frac{1}{5}$

5. -4^2

6. $(-4)^2$

7. $-\sqrt{49}$

8. $\sqrt[3]{-8}$

9. $\sqrt{-16}$

10. $\sqrt[3]{64}$

