Name _____ Class _____ Date _____

Practice 1-5

Example Exercises

Example 1

Simplify each expression.

1. $-48 \div 6$

2. $(-23)(-3)$

3. $(-6)(32)$

4. $16 \div (-4)$

5. $(14)(-5)(-3)$

6. $(24)(-2) - 15$

7. $-13 + (-2)(17)$

8. $(-3)(4) + 8(-7)$

9. $(-7)(-3) - (-11)(-6)$

10. $\frac{-64}{8} + 3(-4)(2)$

11. $(-32) \div (-16) + 2(-6)$

12. $(-7)(-15) - \left(\frac{-18}{3}\right)$

Evaluate each expression for $x = -6, y = 3$, and $z = -5$.

13. $7x - z$

14. xyz

15. $4y \div (-3z)$

16. $\frac{10x}{y - 1}$

17. $\frac{xy}{z - 1}$

18. $5z - 4xy$

19. $\frac{2(x - y)}{5}$

20. $xy + 8z$

21. $\frac{-5(x + y)}{3}$

Example 2

Find the mean rounded to the nearest tenth.

22. 2, −7, 9, −7, −2, 8, 7

23. 23, −10, −8, 33, 28, −13

24. −4, −7, 12, 10, −1, −7, 1, −9, 1, 12, −15

25. −25, −28, −6, 8, 2, −1, 9, −11, 3, 7

26. −1, 5, 0, 1, −4, −1, −8, 1, −4, 1, 0, −7, −19

27. −3, 8, 2, −11, 5, 0, 1, −5, −8, 1, 12, 17, 30

Example 3

Simplify each expression.

28. $(-5)^3$

29. $(-4)^4$

30. -2^4

31. $4^2 + (-7)^2$

32. $-(-3)^3$

33. $-8^2 - (-9)^2$

34. $\left(\frac{-18}{6}\right)^3$

35. $-(-6)^3 \div (-3)^2$

36. $\frac{12^2}{(-2)^3}$

Evaluate each expression for $x = -4, y = -3$, and $z = 2$.

37. x^3

38. x^2z

39. y^5

40. $(x + z)^3$

41. $\frac{-6y^2}{z}$

42. $4x^2 - z$

43. $3x^2 \div y$

44. $3x - y^2$

45. x^2y^3

46. $\frac{6x}{-y} + z^3$

47. $x^3 \div z^2$

48. $(xyz)^2$