

Practice 1-6

Multiplying and Dividing Real Numbers

Simplify each expression.

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|----------------------|-----------------------------|----------------------------|
| 1. $(-2)(8)$ | 2. $(-6)(-9)$ | 3. $(-3)^4$ |
| 4. -2^5 | 5. $(6)(-8)$ | 6. $(-14)^2$ |
| 7. $2(-4)(-6)$ | 8. $-30 \div (-5)$ | 9. $\frac{-52}{-13}$ |
| 10. $(-8)(5)(-3)$ | 11. -7^2 | 12. -3^5 |
| 13. $\frac{-68}{17}$ | 14. $\frac{(-4)(-13)}{-26}$ | 15. $\frac{225}{(-3)(-5)}$ |

Evaluate each expression.

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| 16. x^3 for $x = -5$ | 17. $s^2t \div 10$ for $s = -2$ and $t = 10$ |
| 18. $-2m + 4n^2$ for $m = -6$ and $n = -5$ | 19. $\frac{v}{w}$ for $v = \frac{2}{5}$ and $w = -\frac{1}{2}$ |
| 20. $-cd^2$ for $c = 2$ and $d = -4$ | 21. $(x + 4)^2$ for $x = -11$ |
| 22. $\left(\frac{a}{b}\right)^2 + b^3$ for $a = 24$ and $b = -6$ | 23. $4p^2 + 7q^3$ for $p = -3$ and $q = -2$ |
| 24. $(e + f)^4$ for $e = -3$ and $f = 7$ | 25. $5f^2 - z^2$ for $f = -1$ and $z = -4$ |

Simplify each expression.

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|--|---------------------------|--------------------------|
| 26. $2^4 - 3^2 + 5^2$ | 27. $(-8)^2 - 4^3$ | 28. $32 \div (-7 + 5)^3$ |
| 29. $\frac{3}{4} \div \left(-\frac{3}{7}\right)$ | 30. $18 + 4^2 \div (-8)$ | 31. $26 \div [4 - (-9)]$ |
| 32. $4^3 - (2 - 5)^3$ | 33. $-(-4)^3$ | 34. $(-8)(-5)(-3)$ |
| 35. $(-3)^2 - 4^2$ | 36. $\frac{-45}{-15}$ | 37. $(-2)^6$ |
| 38. $\frac{-90}{6}$ | 39. $\frac{-15}{(7 - 4)}$ | 40. $\frac{195}{-13}$ |

Evaluate each expression.

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| 41. $(a + b)^2$ for $a = 6$ and $b = -8$ | 42. $d^3 \div e$ for $d = -6$ and $e = -3$ |
| 43. $(m + 5n)^3$ for $m = 2$ and $n = -1$ | 44. $j^5 - 5k$ for $j = -4$ and $k = -1$ |
| 45. $xy + z$ for $x = -4$, $y = 3$, and $z = -3$ | 46. $4s \div (-3t)$ for $s = -6$ and $t = -2$ |
| 47. $\frac{r^3}{s}$ for $r = -6$ and $s = -2$ | 48. $\frac{-h^5}{-4}$ for $h = 4$ |