

Integers: Find the value of each expression.

1.  $-(-12 + 2)$

2.  $2(-5) - 4(-3)$

3.  $\frac{48}{-6}$

4.  $-(-29 + 4)$

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

6.  $5.1(-4) - 3(-.02)$

Equations: Solve each equation for x.

7.  $3x + 4 = 11$

8.  $\frac{x}{2} - 17 = 7$

9.  $2x + 13 = -3$

Exponents: Simplify each exponent.

10.  $x^8 \cdot (2x)^5$

11.  $\frac{-9x^8y^{10}z^9}{3x^3y^2z^4}$

12.  $3x^3 + 15x^3 - 5x^2 - 3x^2$

Polynomials: Multiply these polynomials.

13.  $4x(x + 6)$

14.  $(4x + 1)(x + 6)$

15.  $(x + 3)(x - 3)$

16.  $x^2(x + 5)$

17.  $(x - 3)(x + 9)$

18.  $(x + 3)(x + 3)$

Factoring: Factor each of these polynomials.

19.  $x^2 - 64$

20.  $x^2 - 9x - 36$

21.  $12x + 22$

22.  $x^2 - 81$

23.  $x^2 - 5x - 36$

24.  $3x^3 + 12x$

Racials: Simplify.

25.  $\sqrt{200}$

26.  $\sqrt{125}$

27.  $\sqrt{64x^4}$

Add or Multiply these radicals.

28.  $\sqrt{20} + \sqrt{45}$

29.  $\sqrt{5} \cdot \sqrt{8}$  (*simplify*)

30.  $5(\sqrt{5} - \sqrt{2})$

Solve these equations: don't forget to distribute.

31.  $\frac{-4}{7}x + 4 = 28$

32.  $5(6x - 1) + 20x = 0$

33.  $2(x+11) = 9(x-3)$