

# Simplifying Radical Expressions

## Radical Expressions

$$\sqrt[n]{x}$$

$$\sqrt{121}$$

$$\sqrt{1}$$

$$\sqrt{0}$$

$$\sqrt{\frac{36}{49}}$$

$$\sqrt{x^2}$$

Prime Numbers - Numbers greater than one that are only divisible by one and itself.

2

3

5

7

9

10

Prime Factorization - a number written as a product of prime numbers

32

104

1. Simplify each radical expression.

a)  $\sqrt{60}$

b)  $\sqrt{96}$

c)  $\sqrt{128}$

d)  $\sqrt{\frac{184}{2}}$

e)  $\sqrt{42}$

f)  $\sqrt{x^2 y^4}$

g)  $\sqrt{x^4 y^6 z^3}$

h)  $\sqrt{32 a^5 b^3}$

i)  $\sqrt{\frac{x^7 y^6}{z^{11}}}$

j)  $\sqrt{\frac{ab^2}{c}}$

k)  $\sqrt{\frac{b}{16a^4}}$