

Square Roots and Exponents

A square root asks: what number times itself gives this number?

$$\sqrt{49} = 7$$

because $(7)(7) = 49$

$$\sqrt{144} = 12$$

because $(12)(12) = 144$

Evaluate:

$$\sqrt{25} =$$

$$\sqrt{196} =$$

$$\sqrt{64} =$$

$$\sqrt{400} =$$

$$\sqrt{121} =$$

$$\sqrt{900} =$$

Perfect Squares to Know

$$1^2 =$$

$$11^2 =$$

$$30^2 =$$

$$2^2 =$$

$$12^2 =$$

$$40^2 =$$

$$3^2 =$$

$$13^2 =$$

$$50^2 =$$

$$4^2 =$$

$$14^2 =$$

$$60^2 =$$

$$5^2 =$$

$$15^2 =$$

$$70^2 =$$

$$6^2 =$$

$$16^2 =$$

$$80^2 =$$

$$7^2 =$$

$$17^2 =$$

$$90^2 =$$

$$8^2 =$$

$$18^2 =$$

$$100^2 =$$

$$9^2 =$$

$$19^2 =$$

$$10^2 =$$

$$20^2 =$$

Exponents

An exponent tells how many times to use the base as a factor.

$$3^2 = (3)(3) = 9$$

$$2^3 = (2)(2)(2) = 8$$

Evaluate:

$$5^2 =$$

$$2^4 =$$

$$8^2 =$$

$$3^4 =$$

$$4^5 =$$

$$5^4 =$$

$$10^3 =$$

$$2^6 =$$

Powers of 3

Powers of 4

Powers of 6

$$2^3 =$$

$$2^4 =$$

$$3^3 =$$

$$3^4 =$$

$$2^6 =$$

$$4^3 =$$

$$4^4 =$$

$$3^6 =$$

$$5^3 =$$

$$5^4 =$$

$$6^3 =$$

$$7^3 =$$

Powers of 5

$$8^3 =$$

$$2^5 =$$

$$9^3 =$$

$$3^5 =$$

$$10^3 =$$

Powers of 2

Each answer _____ the previous answer.

$$2^1 =$$

$$2^6 =$$

$$2^2 =$$

$$2^7 =$$

$$2^3 =$$

$$2^8 =$$

$$2^4 =$$

$$2^9 =$$

$$2^5 =$$

$$2^{10} =$$

$$9^2 =$$

$$10^5 =$$

$$\sqrt{169} =$$

$$\sqrt{10000} =$$

$$3^4 =$$

$$5^4 =$$

$$\sqrt{2500} =$$

$$2^{10} =$$

$$2^6 =$$

$$\sqrt{324} =$$

$$\sqrt{361} =$$

$$3^3 =$$