

Name _____ Block _____

$$\underline{a^m \cdot a^n = a^{m+n}}$$

$$\underline{(a^m)^n = a^{m \cdot n}}$$

$$\underline{(ab)^m = a^m b^m}$$

$$\underline{\frac{a^m}{a^n} = a^{m-n}}$$

$$\underline{\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}}$$

$$x^5 \cdot x^4 =$$

$$(2^5)^2 =$$

$$\frac{4^3}{4^2} =$$

$$\left(\frac{2}{x}\right)^3 =$$

$$2^3 \cdot 2^2 =$$

$$(3^5)^3 =$$

$$\frac{x^7}{x^2} =$$

$$\left(\frac{x}{y^2}\right)^4 =$$

$$m^{12} \cdot m^7 =$$

$$(xy)^4 =$$

$$\frac{3m^4}{m} =$$

$$\left(\frac{m^5}{m^3}\right)^2 =$$

$$3 \cdot 3^3 =$$

$$(2x)^2 =$$

$$\frac{12x^2y^4}{3xy} =$$

$$x \cdot x^4 =$$

$$(-3x)^3 =$$

$$y^3 \cdot y^6 =$$

$$-(4y^2)^4 =$$

$$\frac{-27m^3n^2}{9mn^2} =$$

$$\left(\frac{2x^3y}{4x}\right)^3 =$$

$$x^{12} \cdot x^{-3} =$$

$$(ab^3)^5 =$$

$$y^{-5} \cdot y^{-3} =$$

$$(x^2y^3)^{10} =$$

$$\frac{4x^3y^5}{12x^5y^7} =$$

$$\left(\frac{6}{ab^2}\right)^4 =$$

$$m^2 \cdot m^{-7} =$$

$$(xy^{-2})^5 =$$

$$(2x^{-3})^4 =$$

$$\frac{m^3y^2}{m^2y^3} =$$

$$\left(\frac{16m^2n}{4mn^5}\right)^2 =$$

$$(m^{-2}n^{-3})^{-5} =$$

$$(xy^{-2})^{-3} =$$

$$\frac{x^5yz^3}{xy^4z^3} =$$

$$\frac{(4x^2y)^3}{4xy^3} =$$

$$(4xy^{-2})^3 =$$

$$\underline{a^0 = 1}$$

$$\underline{a^{-n} = \frac{1}{a^n}, a^n = \frac{1}{a^{-n}}}$$

$$6^0 =$$

$$6^{-1} =$$

$$\frac{1}{6^{-1}} =$$

$$x^0 =$$

$$x^{-3} =$$

$$\frac{x}{x^{-5}} =$$

$$42,761^0 =$$

$$xy^{-5} =$$

$$\frac{xy^2}{x^{-1}y^{-3}} =$$

$$5^0 x^2 =$$

$$3x^2 y^{-7} =$$

$$\frac{xy^2}{(xy)^{-4}} =$$

$$-12^0 y^3 =$$

$$4x^{-3}y =$$

$$(5x^2 y^7)^0 =$$

$$3^{-2} xy^{-5} =$$

$$17x^0 y^3 =$$

$$12x(xz^2)^{-2} =$$

$$12m^5 n^0 =$$

$$(432x^2 y^5)^0 =$$

$$\frac{m^{-2}y}{m^2 y} =$$

$$\frac{xy^{-3}}{x^4 y} =$$

$$\frac{m^3 n^2}{m^{-2} n^{-3}} =$$