1 as an exponent:

For every number a,

 $a^1 = a$

Any number raised to the first power = itself

If there is no exponent on a number it is assumed to be 1

any number, a, to the zero power equals 1

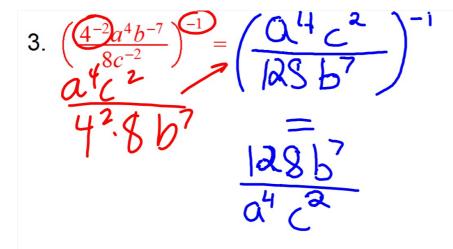
EXCEPT: a can't be zero.

EXCEPT a can't be zero.

Simplify each. Make sure exponents aren't negative or zero.

1.
$$\frac{-3c^5d^{-7}}{e^{-2}g^0} = \frac{-3c^5e^3}{37} = \frac{-3c^5e^3}{37}$$

2.
$$\frac{6^{-2}j^{-3}}{2^{-3}k^{-1}} = \frac{2^{-3}k^{-1}}{6^{-3}j^{-3}} = \frac{2^{-3}k^{-1}}{36j^{-3}} = \frac{2^{-3}k^{-1}}{3$$

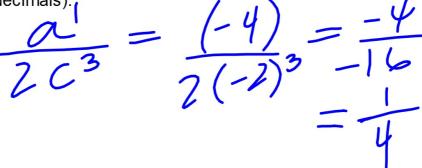


Evaluate each expression for a= -4, b=6, and c= -2. Give fractional answers in reduced form (no decimals).

$$4. \ 3a^{-2}b = \frac{3b}{a^{2}} = \frac{3(6)}{(-4)^{2}} = \frac{18}{+1b}$$

$$= \frac{9}{8}$$

5.
$$\frac{c^{-3}}{2a^{-1}} =$$

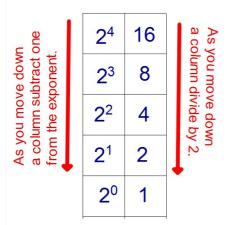


Evaluate each expression for a= -4, b=6, and c= -2. Give fractional answers in reduced form (no decimals). _ 2

6.
$$-b^{-2}c^2 =$$

6. $-b^{-2}c^2 =$

Fill in the next number in the right-hand column



$$a^0 = 1$$
 zero

any number, **a**, to the zero power equals 1

EXCEPT: a can't be zero.

Simplify each. Write your answer so that no exponents are zero or negative.

Take a small white board.

$$Q^{-5} = \frac{1}{Q^5}$$

$$5\dot{a}^{-2}$$
 $\frac{5}{a^2}$

$$\frac{4}{e^{-3}}$$
 4 e^{3}

$$7Q^{-5}R^0 \frac{7}{Q^5}$$

$$\frac{-7x^{-2}}{y^{-1}} - \frac{7y}{x^{2}} = \frac{6b^{-2} + c^{0}}{6b^{-2} + 1}$$

$$\frac{6b^{-2} + c^{0}}{b^{2}}$$

$$\frac{3^{-2}m^{-4}n}{9m^{4}} \frac{c^{-3}d^{-2}}{-6b^{4}} \\
-\frac{6b^{4}c^{3}d^{2}}{-6b^{4}c^{3}d^{2}}$$

$$\frac{10p^{-5}q^{6}}{m^{0}n^{-2}} \quad \frac{10 \quad n \quad q^{5}}{p^{5}} \quad \frac{5^{-2}a^{-1}b^{-4}}{4c^{6}d^{-7}}$$

$$\frac{d}{|00 \quad c^{6}a^{1}b^{4}|}$$

$$(m^{2}n^{7})^{-1} \frac{1}{m^{2}n^{7}} \qquad \left(\frac{a^{-3}}{b^{8}}\right)^{-1} \left(\frac{1}{a^{3}b^{8}}\right)^{-1}$$

$$\left(\frac{m^{-6}n^4}{t^{-2}}\right)^{-1} \left(\frac{t^2n^4}{m^6}\right)^{-1} = \frac{m^6}{t^2n^4}$$

No Bookwork for Friday!

IXL #6 - V.1 & V.3 due tomorrow by 4pm!