

PROPERTY

1.  $\frac{x^m}{x^n} = x^{m-n}$

①  $\frac{4x^4}{3}$

SUBTRACT SMALLER EXP. FROM LARGER ONE AND WE HAVE X TO THAT POWER WHERE THE LARGER ONE WAS

ex:  $\frac{x^3}{x^{10}} = \frac{1}{x^7}$

②  $\frac{4}{3x^4}$

③  $\frac{-5y^8}{x^5}$

④  $\frac{-x^6}{y^{12}}$

⑤  $\frac{81m^{12}n^4}{9^{20}}$

PROP.  
 $x^0 = 1$

$3^4 = 81$   
 $3^3 = 27$   
 $3^2 = 9$   
 $3^1 = 3$   
 $3^0 = 1$

☺<sup>0</sup>  
= 1

⑥  $-2^0 = -1$

⑦  $(-2)^0 = 1$

PROP

1.  $\frac{1}{x^{-2}} = \frac{x^2}{1}$

2.  $x^{-5} = \frac{x^{-5}}{1} = \frac{1}{x^5}$

⑧  $\frac{-3}{x^4}$

⑨  $\frac{1}{3^2} - \frac{1}{2^3} = \frac{1}{9} - \frac{1}{8}$

$\frac{8}{72} - \frac{9}{72} = \frac{-1}{72}$

⑩  $\frac{(-2)^{-2}}{4x^3} \cdot \frac{(4x^3)^2}{(-2)^2} = (-2x^3)^2$

PROP  
 $\left(\frac{x}{y}\right)^{-3} = \left(\frac{y}{x}\right)^3$

$(-2)^2 (x^3)^2 = 4x^6$