

Pick 3 colours of markers, pens, etc.

Colour #1 - bases

Feb. 12, 2020

Colour #2 - exponents

Day 3

Colour #3 - other (operations, numbers, etc.)

EXPONENT LAWS

Your Name

Period

On back of booklet

exterior FRONT	interior	
	LEFT	RIGHT
Zero Exponent $a^0 = 1$	$7^0 = 1$	$(xy)^0 = 1$
Product of Powers $a^m \times a^n = a^{m+n}$	$3^2 \times 3^3 = 3^5 = 243$	$(xy^2)(x^3y^5) = x^4y^7$
Quotient of Powers $a^m \div a^n = a^{m-n}$	$4^8 \div 4^6 = 4^2 = 16$	$\frac{x^8y^4}{x^3y} = x^5y^3$

FRONT	LEFT	RIGHT
Power of a Power $(a^m)^n = a^{mn}$	$(2^3)^2 = 2^6 = 64$	$(x^4y^3)^2 = x^8y^6$
Power of a Product $(ab)^m = a^mb^m$	$(3 \times 5)^2 = 3^2 \times 5^2$ $= 9 \times 25$ $= 225$	$(xy)^6 = x^6y^6$
Power of a quotient $\left(\frac{a}{b}\right)^n = \frac{a^n}{b^n}$	$\left(\frac{6}{2}\right)^2 = \frac{6^2}{2^2} = \frac{36}{4} = 9$	$\left(\frac{x}{y}\right)^4 = \frac{x^4}{y^4}$