Multiplying

Powers with the Same Base

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Raising a

Power to a Power

_____

Dividing

Powers with the Same Base

_____

Algebra:	Example 1a:	Example 1b:	Example 1c:
	$7^5 \cdot 7^8 \cdot 7 =$	$(-3)^2 \cdot (-3)^4 =$	$3x^5 \cdot 12x^7 \cdot x =$
Algebra:	Example 2a:	Example 2b:	Example 2c:
	$(2^5)^3 =$	$(3z^2)^3 =$	$(4x^6)^2(xy^4)^2 =$
Algebra:	Example 3a:	Example 3b:	Example 3c:
	$\frac{10^8}{10^3} =$	$\frac{6^2 \cdot 6^7}{6^3} =$	$\frac{-2x^2y^8}{8x^3y^5} =$

Multiplying

Powers with the Same Base

add the exponents

Raising a

Power to a Power

multiply the exponents

Dividing

Powers with the Same Base

Subtract the exponents

Algebra:

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

Example 1a:

$7^5 \cdot 7^8 \cdot 7 =$ 7^{14}

Example 1b:

$(-3)^2 \cdot (-3)^4 =$ $(-3)^6$

Example 1c:

$3x^5 \cdot 12x^7 \cdot x =$ $36x^{13}$

Algebra:

$(a^m)^n = a^{mn}$

Example 2a:

$(2^5)^3 =$ 2^{15}

Example 2b:

$(3z^2)^3 =$ $27z^6$

Example 2c:

$(4x^6)^2(xy^4)^2 =$ $16x^{14}y^8$

Algebra:

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

Example 3a:

$\frac{10^8}{10^3} =$ 10^5

Example 3b:

$\frac{6^2 \cdot 6^7}{6^3} =$ 6^6

Example 3c:

$\frac{-2x^2y^8}{8x^3y^5} =$ $\frac{-1y^3}{4x}$

Directions

Step 1: Print pages 1 & 2 (along the short edge).
Step 2: Cut along the thick dotted line at the bottom and discard that piece.
Step 3: Fold in half (hamburger style)
Step 4: Cut just the top half along the dotted lines to create the three tabs.

The final product should look like this: