

# U1L3 Exponent Laws pt 2 notes

November-21-14 8:13 AM

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

eg.  $(6^2)^4 = 6^{2 \times 4} = 6^8$

$$(ab)^m = a^m b^m$$

↑ write in exponent 1 if no exponent

eg.  $(2^3 3^2)^4 = 2^{3 \times 4} 3^{2 \times 4} = 2^{12} 3^{12}$

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

eg.  $\left(\frac{2}{3}\right)^3 = \frac{2^3}{3^3} = \frac{8}{27}$

## Evaluate

ex1)  $(3^2 \cdot 3^3)^3 - (4^3 \times 4^2)^2$  Bedmas: do brackets first

$$= (3^5)^3 - (4^5)^2$$
$$= 3^{15} - 4^{10}$$
$$= 13,300,331$$

ex2)  $[(-5)^3 + (-5)^4]^0$

$$= 1$$

Assignment: U1L3 wkst # 1-7 (omit 3); # 9 (A)(C)(E); 11-12 (A)(C)(E); 14 (A) / 23 total