

Left → Right

✓ ✓ ↓  
 A1 A2 A4

# Notes #4 : BEDMAS using Exponent Laws

Note Title 17/11/2014

1. Write as Repeated Multiplication. Then evaluate.

a)  $2(4)^3 = 2 \times 4 \times 4 \times 4 = \boxed{128}$

↑      ↑  
Coefficient      base  
Multiply it in.

b)  $-4^3 = -1 \times 4 \times 4 \times 4 = \boxed{-64}$

↑  
Base

c)  $-5[(-3)^2]^3 = -5 \times (-3) \times (-3) \times (-3) \times (-3) \times (-3) \times (-3) = \boxed{-3,645}$

↑      ↓  
Coeff.      Base

2. Solve. Use BEDMAS.

a)  $4^2 - 8 \times 3$

16 - 8 × 3

16 - 24

$\boxed{-8}$

b)  $7 \times (-2) - 18 \div 3^2$

7 × (-2) - 18 ÷ 9

-14 - 2

$\boxed{-16}$

c)  $\left(\frac{-2 \times -6}{4^0}\right)^2 - 3(-4^2)$

$\left(\frac{12}{1}\right)^2 - 3(-4^2)$

144 - 3(-16)

144 - (-48)

144 + 48 =  $\boxed{192}$

d)  $-[(6^0 - 2^2) \times -3]^2$

- [1 - 4 × -3]^2

- [-3 × -3]^2

- [9]^2

$\boxed{-81}$