

ORDER OF OPERATIONS

Math 9

Ex 1) Calculate $5^2 + [16 \times (2^2 - 6)]$.

$$5^2 + [16 \times (4 - 6)]$$

$$5^2 + [16 \times (-2)]$$

$$5^2 + [-32]$$

$$25 + (-32)$$

$$\boxed{-7}$$

Ex 2) Evaluate $-2(-15 - 4^2) + 4(2 + 3)^3$

$$-2(-15 - 4^2) + 4(5)^3$$

$$-2(-15 - 16) + 4(125)$$

$$-2(-31) + 500$$

$$62 + 500$$

$$= \boxed{562}$$

$$\text{Ex 3) } \frac{(4^2 + 3^2) + 5 + 5}{(4^2 - 3^2) + 3} = \frac{(16 + 9) \div 5 + 5}{(16 - 9) + 3}$$

$$= \frac{(25) \div 5 + 5}{(7) + 3}$$

$$= \frac{5 + 5}{7 + 3}$$

$$= \frac{10}{10}$$

$$= \boxed{1}$$