

Lesson Plan

Grade 9 Academic Math

Lesson: 3

Unit: Grade 8 Review

Topic: Integers and BEDMAS

✚ *homework check:* NPM 9 p. 35, p. 492, p. 501

✚ *note:* Grade 8 Review (cont'd)

Integers – when working with integers, simplify first so that there is only one sign in between the numbers. Always keep the sign of the bigger number when asked to add or subtract. For example:

$$\begin{array}{lll} -3 + (-4) = & & 3 - (-7) = \\ & & = 3 + 7 \\ = -3 - 4 & -5 + 3 = & = 10 \\ = -7 & = -2 & \end{array}$$

Whenever multiplying or dividing, remember that same signs result in a positive outcome, while different signs result in a negative outcome. For example:

$$\begin{array}{ll} 4(2) = 8 & \frac{8}{2} = 4 \\ 4(-2) = -8 & \frac{8}{-2} = -4 \\ -4(2) = -8 & \frac{-8}{2} = -4 \\ -4(-2) = 8 & \frac{-8}{-2} = 4 \end{array}$$

Order of Operations – always follow BEDMAS!

B – brackets

E – exponents

D

M – division and multiplication done in the order they appear left to right

A

S – addition and subtraction done in the order they appear left to right

$$\begin{array}{ll} \frac{(-3)^2 + 9}{6} + (4 - 6) = & \\ & = \frac{9 + 9}{6} + (-2) \\ -3 + (2 - 7)^3 = & \\ & = \frac{18}{6} - 2 \\ & = 3 - 2 \\ & = 1 \\ & = -3 + (-5)^3 \\ & = -3 - 125 \\ & = -128 \end{array}$$

▣ *homework assignment:* NPM 9 p. 492 - 495