



**MFM2PI: Unit 1 - Linear Equations**

**Day 1 - Integers and Order of Operations**

***Integer Operations***

Example 1: Find each sum: (sum is the answer when you add)

a)  $5 + (-2)$

b)  $3 + (-7)$

c)  $-7 + (-6)$

d)  $-4 + 10$

Example 2: Find each difference: (difference is the answer when you subtract)

a)  $15 - 6$

b)  $-7 - 2$

c)  $8 - (-8)$

d)  $-2 - (-11)$

e)  $-7 - (-3) - 6$

Example 3: Find each product: (product is the answer when you multiply)

a)  $(-5)(3)$

b)  $6(-7)$

c)  $(-8)(-4)$

d)  $(-7)(-3)(-5)$

Example 4: Find each quotient: (quotient is the answer when you divide)

a)  $(-24) \div 6$

b)  $(-60) \div (-12)$

c)  $26 \div 2$

A fun tool to help us remember how to multiply/divide positive and negative integers!

Good Guy/Bad Guy

Good Guy/ Bad Guy	In Town/ Out of Town	Results

***Order of Operations***

We need to follow the order  
calculating expressions.

of operations when we are

**B                      E                      D                      M                      A                      S**

Example 5 Simplify

a)  $5 + 27 \div (-9)$

b)  $\frac{1}{2} (8 + 12) \div 5$

c)  $(8 - 3) + (1 - 6)$

d)  $(4)(-1) + (7 - 2)$

e)  $3(-2 + 4)^3 - 2(-4 + 1)$

f)  $-4(-2)^3 - 3(-4)^2$

To evaluate expressions when specific values are given for the variable:

- Substitute in the value for the variable (always put in brackets)
- Solve using order of operations

Ex. 2 Evaluate each of the following:

a)  $xy - 9$  when  $x=2, y=0$

b)  $13p - 7q$  when  $p=2, q=-3$

**Homework: Handouts “Why did the Quiz Show...” And D“Why Should You Look Out...”**