MFM2PI – *Unit 1: Linear Equations – Lesson 2*  Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Solving One-Step Equations**

1. **What Does It Mean to “Solve”?**

When working with equations, we are often asked to “solve” them. But what does it mean to “solve” an equation? ***Solving*** an equation means to find a *value for the variable* that *makes the equation true*.

The method we will use for solving equations involves *three steps*.

1) ***Expand and simplify*** the equation as much as possible.

2) ***Isolate the variables*** (letters) on the ***left side*** of the equation.

3) ***Move all the constants*** (numbers) to the ***right side*** of the equation.

Yesterday, we reviewed how to expand and simplify equations. Today, we will work on rearranging the equations to isolate the variables.

1. **Opposite Operations**

The ***equal sign*** represents a promise – a promise that both sides of an equation will remain in perfect balance. When we rearrange our equation, we have to honour this promise. We do that by considering opposite operations.

The opposite operation to *adding* is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The opposite operation to *multiplying* is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Remember that when we’re working with an equation, *whatever you do to one side, you must do the other!*

1. **Solving One-Step Equations**

*Solve the following one-step equations:*

a) x + 1 = 4 b) a – 2 = 10

c) 4y = 8 d) 

**HW: *Worksheet – Unit 1 – Lesson 2***