Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 7

Chapter 4 – Expressions and Equations Notes #5

 One Step Equations with Rationals

REMEMBER To Solve One-Step Equations:

1) ISOLATE the variable using INVERSE operations.

FRACTIONS Summary:

Addition

* Need a COMMON DENOMINATOR
* ADD numerators
* KEEP denominators

Subtraction

* Need a COMMON DENOMINATOR
* SUBTRACT numerators
* KEEP denominators

Multiplication

* Need a FRACTIONS
* MULTIPLY numerators
* MULTIPLY denominators

Division

* Need a FRACTIONS
* Multiply by the reciprocal: STAY – CHANGE – FLIP
* MULTIPLY numerators
* MULTIPLY denominators

DECIMAL Summary:

Addition

* LINE-UP decimal point
* ADD
* BRING DOWN decimal

Subtraction

* LINE-UP decimal point
* SUBTRACT
* BRING DOWN decimal

Multiplication

* MULTIPLY the values
* COUNT decimal place values in each
* MOVE OVER (toward the left) total value of place

Division

* Make the divisor a whole number: MOVE THE DECIMAL POINT…on the OUTSIDE, INSIDE, and then UP into the quotient
* DIVIDE the values

**Solve showing all steps.**

1. 5 + x = 12
2. x – 0.7 = 3
3. A number x plus one fifth equals four fifths.
4. $\frac{1}{9}x=3$
5. 2x = 15
6. $\frac{y}{2}=0.15$
7. 4.65 = x + 2.3
8. Jack had part of a candy bar. He gave away $\frac{1}{3}$ of what he had, and still had $2\frac{1}{3}$ left. How much of a candy bar did he start with?
9. 0.75 = 0.5x
10. $\frac{1}{4}m= \frac{2}{3}$
11. $\frac{r}{7}=\frac{1}{2}$

YOUR TURN:

12) $\frac{1}{2}x=5$

13) The sum of x and 1.2 is nineteen.