

Foundations for College Algebra - MW
University of North Georgia
Fall 2015
Quiz #2

Name: Key Date: September 2, 2015

Solve the following equations by using and stating the "correct" Algebraic Tool for each new line you write as done in class. Hint: pay close attention to what tool you select!

1. $\widehat{\phi(\forall + \odot)} - ! = \infty$, for \forall

$$\phi\forall + \phi\odot - ! = \infty \text{ Dist}$$

$$-\phi\odot + ! \quad -\phi\odot + !$$

$$\phi\forall = \frac{\infty - \phi\odot + !}{\phi} \text{ A.A. \& A.A. Sol}$$

$$\forall = \frac{\infty - \phi\odot + !}{\phi}$$

M.A.

2. $\widehat{\infty(\Delta + \odot)} = \widehat{\square(\infty - \odot)}$, for ∞

$$\begin{array}{ccccccc} \infty & \Delta & + & \infty & \odot & = & \square \infty - \square \odot \text{ Dist} \\ \uparrow & & & \uparrow & & & \uparrow \\ & & & & & & - \square \infty \quad - \square \infty \end{array}$$

$$\infty \Delta + \infty \odot - \square \infty = -\square \odot \text{ A.A. \& A.A. Sol}$$

$$\infty(\Delta + \odot - \square) = -\square \odot \text{ Dist}$$

$$\infty = \frac{-\square \odot}{(\Delta + \odot - \square)}$$

M.A.

$$3. \widehat{3(x-4)} = \widehat{2(x+3)} + 2$$

$$3x - 12 = 2x + (6 + 2) \text{ Dist}$$

$$3x - 12 = 2x + 8 \quad \text{Assoc.}$$

$$-2x + 12 \quad -2x + 12$$

$$x + 0 = +0 + 20 \quad \text{A.A.}$$

$$\boxed{x = 20}$$

ck

$$3(20-4) = 2(20+3) + 2$$

$$3(16) = 2(23) + 2$$

$$48 = 46 + 2$$

$$48 = 48 \checkmark$$