Name _____

Directions. I will provide an answer key later this week for you to self-score. Please work this quiz **on your own and without a calculator**. Complete the 'Pre-work' section prior to starting and the 'Post-work' section after finishing.

Pre-work self-assessment. Please clearly identify (with a big dot) your comfort with the following mathematical activities:

	Very uncomfortable	Slightly uncomfortable	Neutral	Mostly comfortable	Very comfortable
General arithmetic					
Fractions					
Basic algebra					
e and log rules					
Trig. functions					

Arithmetic and algebra. Please attach additional paper if you need more space.

1. If possible, simplify each expression. If not possible, describe why.

   (a) $\dfrac{x}{5+x}$

   (b) $5(x+2)+x$

   (c) $\dfrac{1}{9}+\dfrac{3}{7}$

2. Solve the following equations for the indicated variable.

   (a) Solve $3x-5=4$ for x.

   (b) Solve $3z-5=z+1$ for z.

(c) Solve $y^2 + 5y + 6 = 0$ for y.

3. Fill in the blank with the appropriate symbol: $=$ or $\neq$.

   (a) $(a+b)^3$ _____ $a^3 + b^3$

   (b) $(5x+2)^2$ _____ $25x^2 + 20x + 4$

   (c) $\sqrt{x+2}$ _____ $\sqrt{x} + \sqrt{2}$

4. Working with functions.

   (a) If $f(x) = x^2 + x - 1$, evaluate $f(1)$, $f(2)$, and $f(x+2)$.

   (b) Consider the quadratic function $f(x) = x^2$. Evaluate $f(3)$ and $f(x+7)$.

5. State the following, if possible (without using the internet).

   (a) Quadratic formula:

   (b) Slope-intercept form of a line:

   (c) Point-slope form of a line:

Post-work self-assessment. After working through these exercises, rethink your level of comfort with these activities. You may choose to complete this section immediately after working the problems or after you self-score the problems above using the posted key. Please clearly identify (with a big dot) your comfort with the following mathematical activities:

	Very uncomfortable	Slightly uncomfortable	Neutral	Mostly comfortable	Very comfortable
General arithmetic					
Fractions					
Basic algebra					
e and log rules					
Trig. functions					

Please compare any differences in your Pre-work and Post-work self-assessments.