Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Algebra II

Score: \_\_\_\_\_\_ / 20

Period: \_\_\_\_\_\_\_\_\_\_\_\_\_ **Cumulative Review #7.1**

***Directions:*** Show all work in order to receive full credit. A correct answer with no supporting work will only receive one credit. Be sure to show all appropriate formulas and formula substitutions as part of your work.

1. The expression $\frac{x^{2}+5x-20}{x-3}$ is equivalent to **Show all work!**
2. $x+8+\frac{4}{x-3}$ (2) $x+8-\frac{4}{x-3}$ (3) $x+8$ (4) $x-8+\frac{4}{x-3}$
3. Solve for x: $\sqrt{x-1}=x-7$ **Show all work!**
4. $\{10,5\}$ (2) $\{5\sqrt{2}\}$ (3) $\{-7,7\}$ (4) $\{10\}$
5. Consider the system below.

$$x+y+z=9$$

$$x-y-z=-1$$

$$x-y+z=21$$

Which value is *not* in the solution, $(x,y,z),$ of the system? **SHOW ALL WORK FOR FULL CREDIT!!!**

1. -8 (2) -6 (3) 11 (4) 4
2. Algebraically solve the following system of equations.

$$\left(x-2\right)^{2}+\left(y-3\right)^{2}=16$$

$$x+y-1=0$$