**Algebra 2 CP Worksheet 8.6 Part 3 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Solve each equation. YOU MUST SHOW YOUR WORK.**

1. $8^{x}=554$ 2. $12^{x}=8$

1. $\left(\frac{4}{3}\right)^{x}=\frac{2}{3}$ 4. $3^{x}+1.8=31.4$
2. $2^{x}-2=3.7$ 6. $6^{-x}=14$
3. $0.9^{2x}=0.25$ 8. $3-\left(\frac{1}{8}\right)^{x}=-2$
4. $5^{3x}-62=432$ 10. $12^{0.2x}+1=29$