Algebra I Class Work 8.4

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Directions: You may use your book, notes, calculator, friends, and teacher. However you may not copy someone else work verbatim. **Show all your work.** If you are not finished at the end of class, write “NEED MORE TIME” at the top and turn your paper in – **you may not take it home.** You have one week to finish it.

Describe the translation(s) of the graph of $y=x^{2}and x^{3}.$

1. $y=x^{3}-7$
2. $y=\left(x-4\right)^{2}$

State the coordinates of the vertex or point of inflection of each function.

1. $y=\left(x+3\right)^{2}+11$
2. $y=\left(x-10\right)^{2}+5$

Write the function role for each translation of the base function $y=x^{2}$.

1. 3 units up
2. 1 unit left