CP Algebra 2 Transformations Unit   Name_____
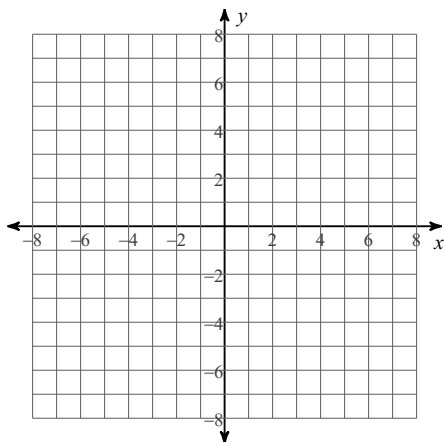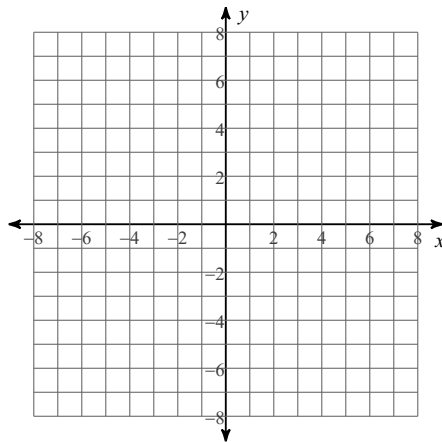
Applying Translation Rules to Graphs   Date_____

For each function, provide a description of how its graph is translated from its parent function, and sketch the graph. You may find it helpful to graph each parent function with key points as well.
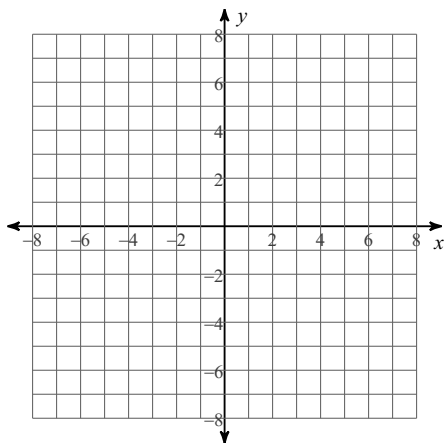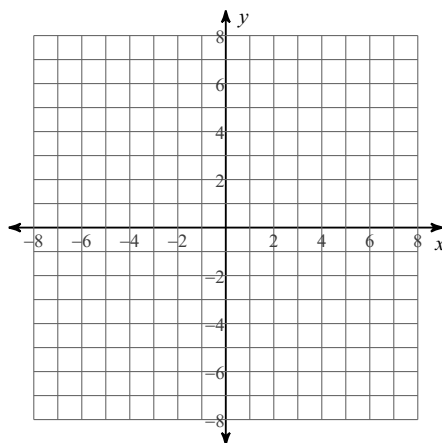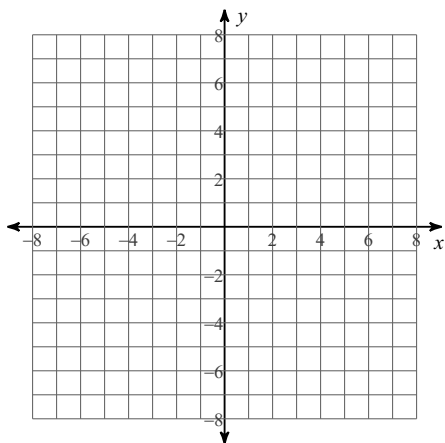
1) $y = |x| + 3$

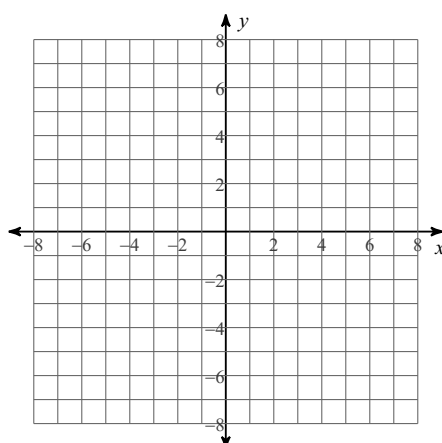2) $y = x^3 - 6$

3) $y = \sqrt{x + 5} - 2$

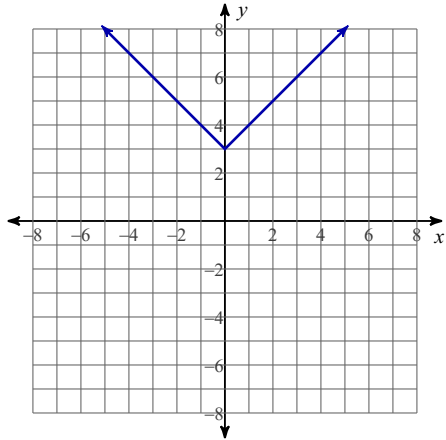4) $y = (x - 4)^2 + 2$
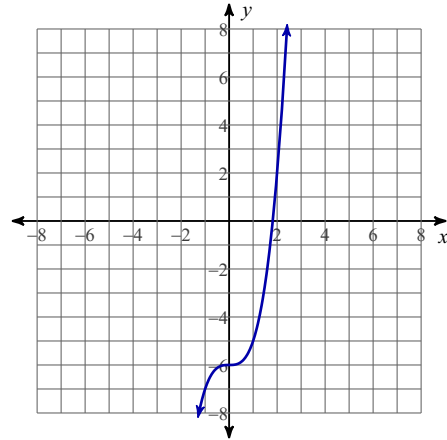
5) $y = x + 3$

6) $y = \sqrt{x} - 3$

Answers to Applying Translation Rules to Graphs
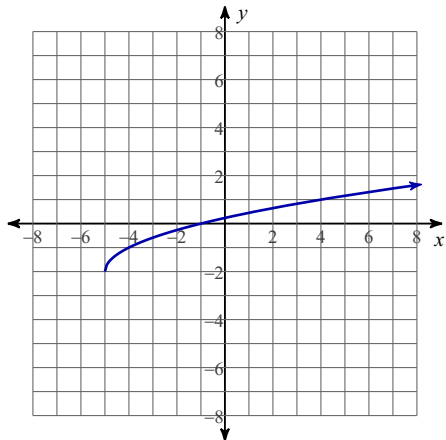
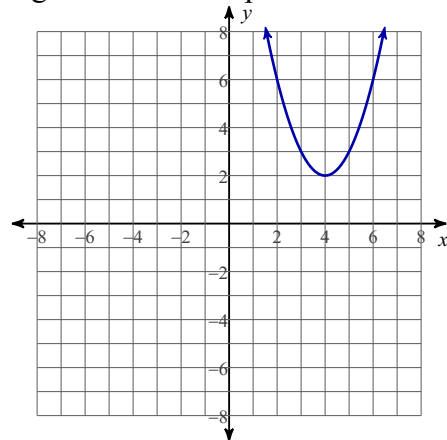1) Absolute value function
    shifted up 3 units.
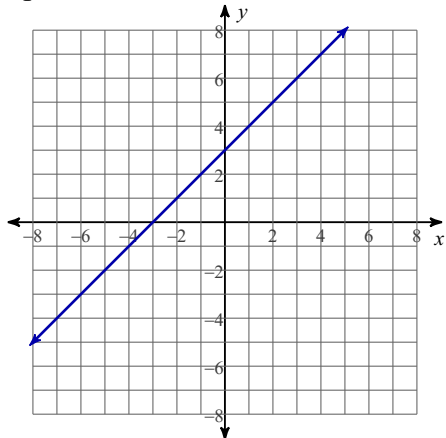
2) Cubic function
    shifted down 6 units.

3) Sqaure root function shifted
    left 5 untis and down 2 units.

4) Quadratic function shifted
    right 4 units and up 2 units.

5) Linear function shifted
    up 3 units.

6) Square root function shifted
    right 3 units.