Combinations of Transformations

1. Given the function y = f(x) and point on the graph (2,6) determine the transformed point, $y = \frac{1}{2}f(x+4) - 5$



2. Given the function y = f(x) and point on the graph (6,-2) determine the transformed point, $y = \frac{1}{2} f(2(x+4)) - 3$



3. Given the function y = f(x) and point on the graph (8,-1) determine the transformed point, y = 3f(2x-6)-4



4. Given the function y = f(x) and point on the graph (-4,2) determine the transformed point, y = -f(2(x-5))+6



5. Given the function y = f(x) has been transformed to, y = 3f(-x+5)-1, and a point on the transformed function is (-3, 8), what is the corresponding point on y = f(x)

6. Given $y = f(x) = \sqrt{x}$, sketch the graph of y = f(x) and the graph of y = 2f(-x-3) + 4. Write the equation for the transformed function



Summary: Make sure the equation is in simplified form before you begin transforming. Then perform in the order Stretches/Reflections, then Translations unless otherwise stated.