Warm ups week of 3.13

Monday:

Let $f(x) = 4x - 3$, $g(x) = 4x^2 - 7x + 3$ and $h(x) = x - 1$.

Find $f + g$, fh, fg, and g/f.

Tuesday:

For each of the problems below, use the clues to write a possible equation for the mystery function.

3. My parent graph is the square root function. I have been shrunk by a factor of 6. I have been shifted 4 units right and 3 units up. What is my equation?

4. My parent graph is the absolute value function. I have been turned upside down. I have been stretched by a factor of $\frac{1}{2}$. My vertex has been moved 8 spaces to the left. What is my equation?

5. My parent graph is the quadratic function. I have been turned upside down. My vertex has been moved 2 spaces upward. What is my equation?

6. My parent graph is the cubic. I have been moved 1 space right and 1 space down. What is my equation?

Wednesday:

Describe transformations from parent function:
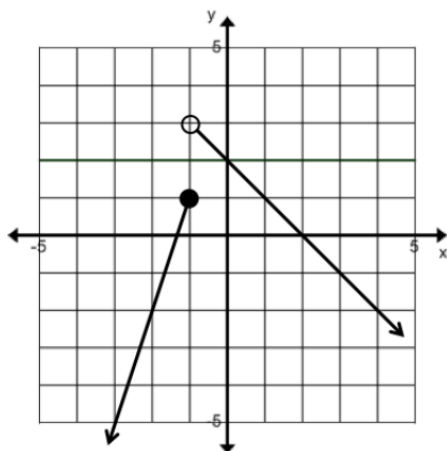
1. $y = -(2x - 6)^2 + 1$

2. $y = \sqrt{-\frac{1}{2}x + 5} - 2$

3. $y = |4x - 1| + 9$

4. $y = 7^{-3x-2} - 1$

Thursday:

Write the piecewise function for the graph shown:

Friday:

Identify the domain, range, asymptote, y-intercept:

1. $y = 3^{x+2} - 11$

2. $y = \log_2(x + 8) - 1$