Honors Algebra II Assignment 9.2

Inverse Function Transformations due Dec 1/2

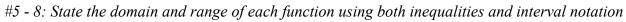
#1 - 4: Write and graph a function with the given transformations to $f(x) = \frac{1}{x}$

1. Translated to the right 7 units Translated down 8 units

2. Translated left 4 units Reflected over *y*-axis

3. Reflected over *x*-axis Stretched vertically by factor of 3

4. Translated right 2 units Reflected over *y*-axis Reflected over *x*-axis



$$5. f(x) = 3(\frac{1}{x+1}) - 2$$

$$6. f(x) = \frac{1}{2(x+2)} + 3$$

7.
$$f(x) = \frac{x+5}{0.5x+2}$$

8.
$$f(x) = \frac{4x + 13}{-2x - 6}$$

9. A movie streaming service costs \$10/month, plus \$1 for each movie you watch. How many movies would you have to watch per month to average out to \$3 for each movie?

10. A video arcade charges a \$15 cover, but each game costs only a nickel to play. How many games would you need to play to bring the average to 25 cents per game?