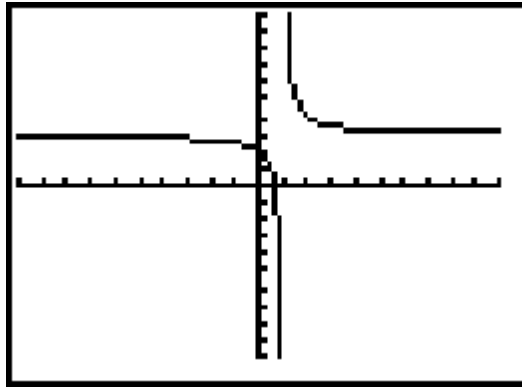
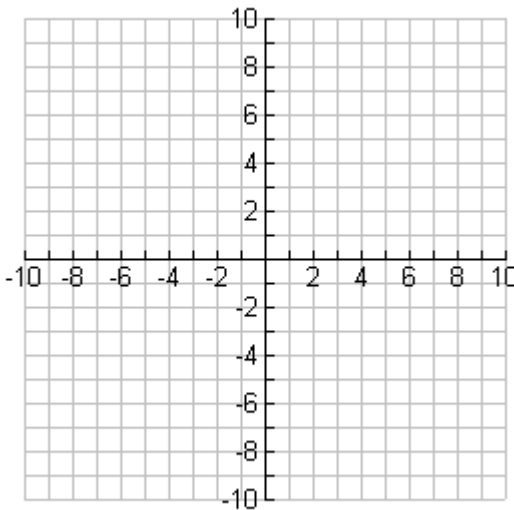


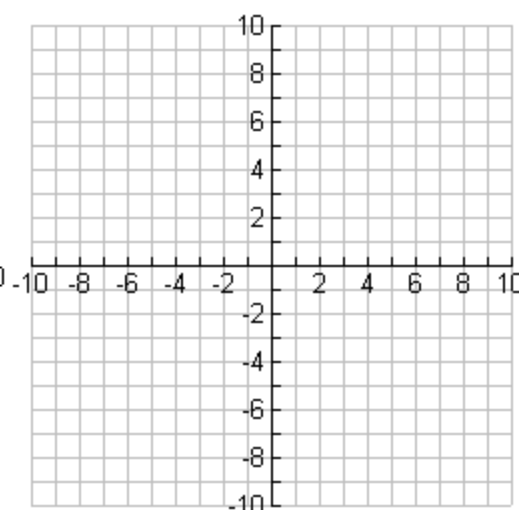
Given the graph of $f(x) = \frac{1}{x-1} + 3$ below, sketch the requested graphs.



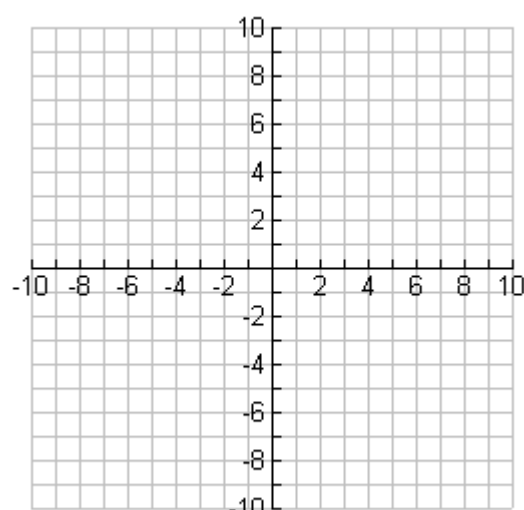
8. $-f(x-2)$



9. $f(x+7)+1$



10. $f(-x)-2$



11. Given $f(x) = \frac{1}{x}$, write the equation of the function that transforms $f(x)$ by reflecting it over the x -axis, vertically stretches by a factor of 5, shifts left 9, and down 2.

12. Given $f(x) = \frac{1}{x^2}$, write the equation of the function that transforms $f(x)$ by reflecting it over the y -axis, shifts right 3, and up 4.