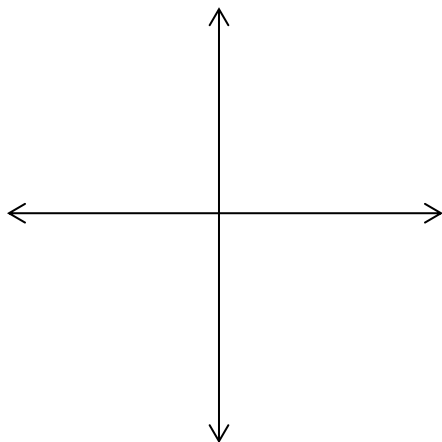


## 8.01 Reciprocal Function Graphing

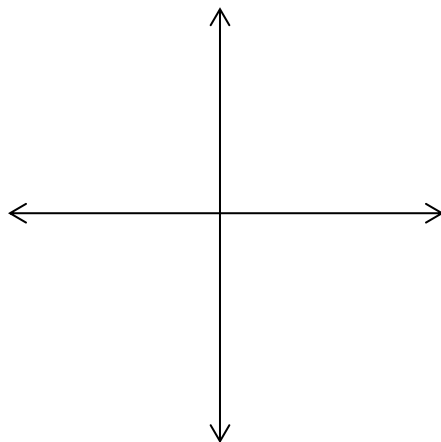
Name \_\_\_\_\_

Graph each function. Label any asymptotes and plot any intercepts. State the domain and range for each graph.

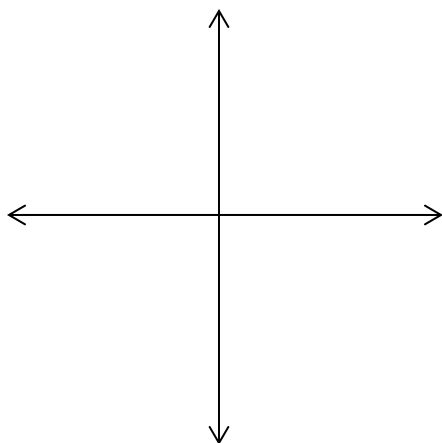
$$f(x) = \frac{1}{x-3} + 2$$



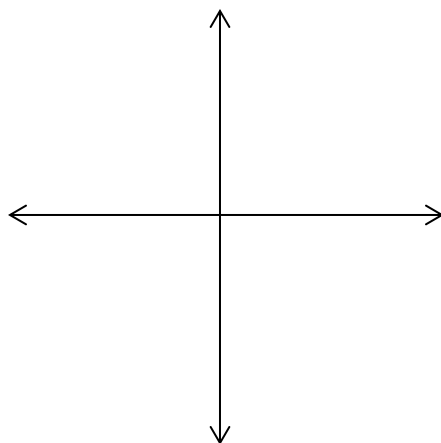
$$g(x) = -1 - \frac{2}{x+1}$$



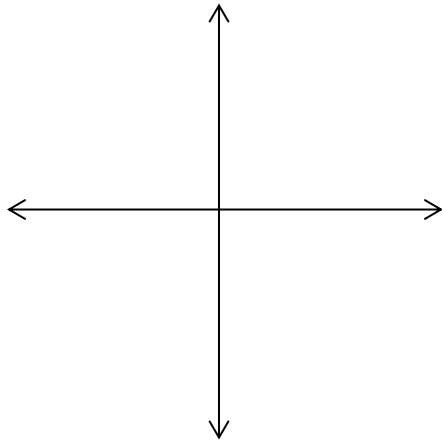
$$h(x) = 2 - \frac{1}{(x-3)^2}$$



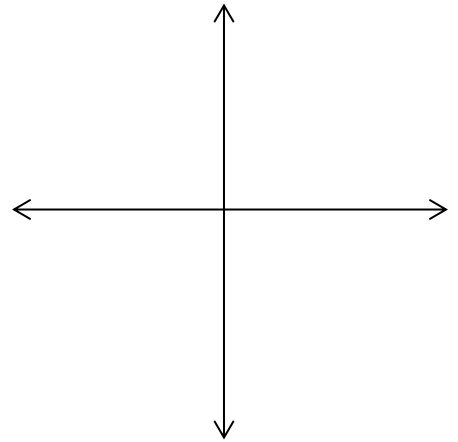
$$t(x) = \frac{3}{(x+1)^2} - 3$$



$$w(x) = \frac{1}{2x-1} + 3$$



$$p(x) = -\frac{1}{4x+3} - 1$$



Divide.

$$(3m^3 + 36m^2 + 68m + 83) \div (m + 10)$$

$$(n^3 + 6n^2 - 3n - 33) \div (n + 5)$$

$$(x^3 - x - 26) \div (x - 3)$$

Final Exam Review:

Given  $f(x) = 2x^2$  and  $g(x) = x - 3$

Find  $f(g(x))$

Find  $(g(f(4)))$