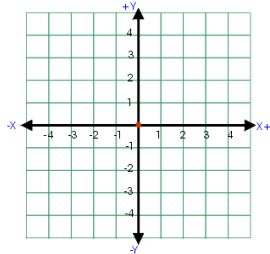


Pre Calc Test Review Ch 1
NO GRAPHING CALCCS

Name _____

1. Graph each, state the domain and range.

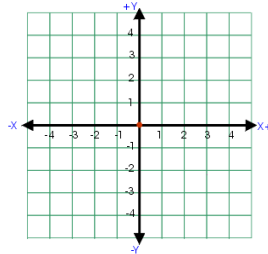
a. $f(x) = -x^2 - 3$



D=

R=

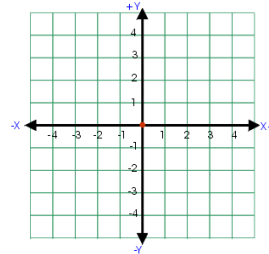
b. $f(x) = \sqrt{x+2}$



D=

R=

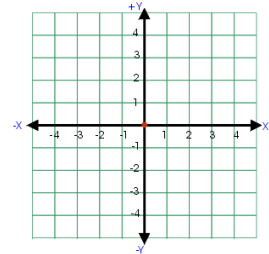
c. $f(x) = 1/(x-4)$



D=

R=

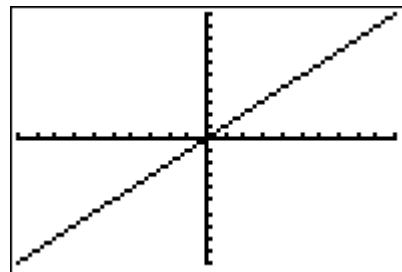
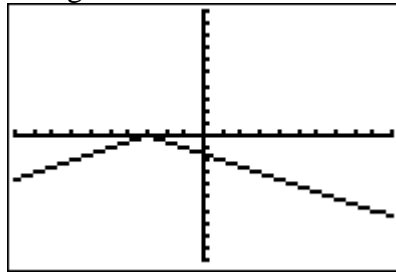
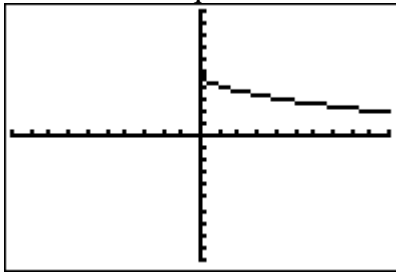
d. $f(x) = x^3 - 2$



D=

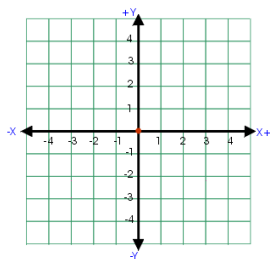
R=

2. Write the equation of the following functions.



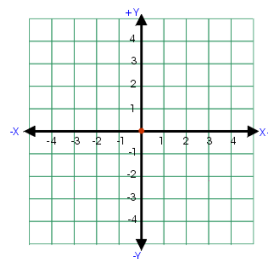
3. Find the inverse of each function. Graph $f(x)$, $f^{-1}(x)$, and $f(x) = x$ on the axis given.

a. $f(x) = (1/2)x - 3$



$f^{-1}(x) =$ _____

b. $f(x) = x^3 + 3$



$f^{-1}(x) =$ _____

For this entire page, use the following functions.

$$f(x) = x + 5 \quad g(x) = x^2 - 3x \quad h(x) = \sqrt{x - 9} \quad j(x) = x^3 + 8 \quad k(x) = \sqrt[3]{\frac{x-2}{7}}$$

1. Find $(f - g)(x)$ 1. _____

2. Find $(f / g)(x)$. On line two, state the domain of $(f / g)(x)$. 2. _____

3. Find $(h \circ f)(x)$. On line two, state the domain of $(h \circ f)(x)$. 3. _____

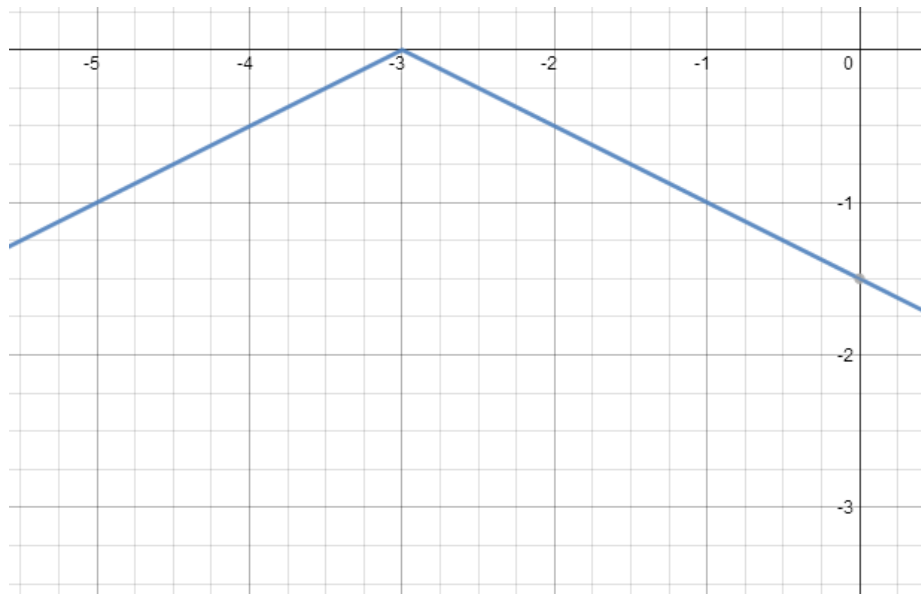
4. Find $(f j)(x)$. 4. _____

5. Are $j(x)$ and $k(x)$ inverses? On line two, state why. 5. _____

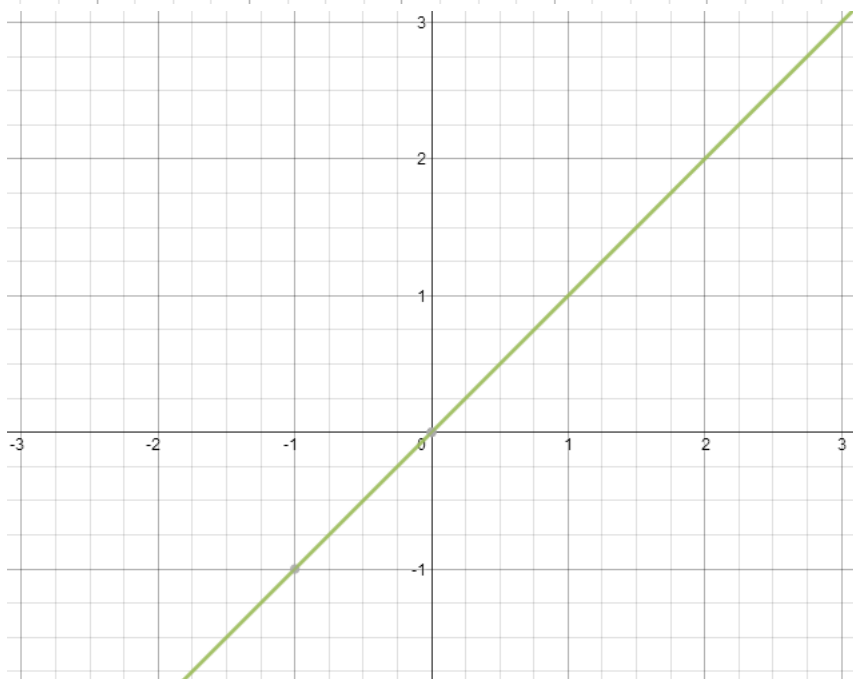
6. State which function above doesn't have an inverse. 6. _____



2a)



2b)



2c)