

Test Form D

Name _____ Date _____

Chapter P

Class _____ Section _____

- Show that $y = \frac{x}{x^2 + 1}$ is symmetric with respect to the origin.
- Find the intercepts: $y = \frac{2x - 1}{3 - x}$.
- Find all points of intersection: $y = -x^2 + 4x$ and $y = x^2$.
- Find an equation for the straight line that passes through the point (2, 3) and is parallel to the line $x = 4$.
- Find an equation in general form for the straight line that passes through the point (-1, 4) and is perpendicular to the line $2x + 3y = 6$.
- If $f(x) = 3 - x^2$, find:
 - $f(3)$
 - $f(-1)$
 - $f(2 + \Delta x)$
- If $g(x) = x^2 + 3x - 1$, find $\frac{g(x + \Delta x) - g(x)}{\Delta x}$.
- If $f(x) = \frac{1}{\sqrt{x}}$ and $g(x) = x^2 - 5$, find $g(f(x))$.
- Find the domain: $f(x) = \frac{1}{x^2 - 2x - 2}$.
- Sketch a graph of $y = x^3 - 1$.
- Sketch the graph of the equation $4x - 2y + 8 = 0$.
- In which of the following equations is y a function of x ?
 - $3x + 2y - 7 = 0$
 - $5x^2y = 9 - 2x$
 - $3x^2 - 4y^2 = 9$
 - $x = 3y^2 - 1$
 - None of these
- Given $f(x) = 3x - 7$, find $f(x + 1) + f(2)$.

