NAME: $\qquad$

## CALCULUS: Chapter 0 Test

Graph the following function on the provided axis.

1. $y=\frac{3}{4} x+1$


Identify all intercepts of the following functions.
2. $f(x)=x^{2}+9 x+14$
3. $f(x)=x^{3}-4 x$
4. $f(x)=3 x+2$

Evaluate $f(x)=x^{2}+2 x-1$ at the following values.
5. $\mathrm{f}(-3)$
6. f(5)
7. $f(x+4)$

Determine if the following functions have $\mathbf{x}$-axis symmetry, $\mathbf{y}$-axis symmetry, symmetry to the origin, a combination of the three, or none. Show all work.
8. $y=x^{2}$
9. $y^{4}=x+2$
10. $y=4 x^{3}+2 x$

Calculate the slopes of the following lines.
11.

12.


Find a line parallel and perpendicular to each given line.
13. $y=\frac{1}{2} x+5$
14. $y=-\frac{5}{6} x+3$

Determine the domain of the following functions.
15. $y=x^{2}+3 x-15$
16. $y=\sqrt{2 x+3}$
17. $y=\frac{x+7}{x-3}$

