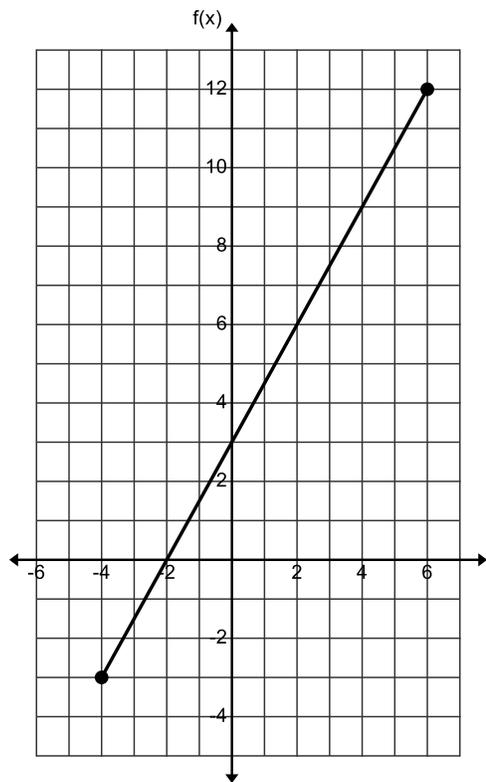


**Unit 5 Day 7 - Use Function Notation Classwork**

Use the graph of  $f(x)$  to answer the following questions. Unless otherwise specified, restrict the domain of the functions to what you see in the graph below. Approximations are appropriate answers.

1. What is  $f(2)$ ?
2. For what values, if any, does  $f(x) = 3$ ?
3. What is the  $x$ -intercept?
4. What is the domain of  $f(x)$ ?
5. On what intervals is  $f(x)$  increasing?
6. On what intervals is  $f(x)$  decreasing?
7. When is  $f(x) > 3$ ?



Consider the linear graph of  $f(t)$  and the nonlinear graph of  $g(t)$  to answer the questions 8-13. Approximations are appropriate answers.

8. Where is  $f(t) = g(t)$ ?
9. When is  $f(t) > g(t)$ ?
10. What is  $f(0) + g(0)$ ?
11. What is  $f(-1) + g(-1)$ ?
12. Which is greater:  $f(0)$  or  $g(-3)$ ?
13. Graph:  $f(t) + g(t)$  from  $-1 \leq x \leq 3$

