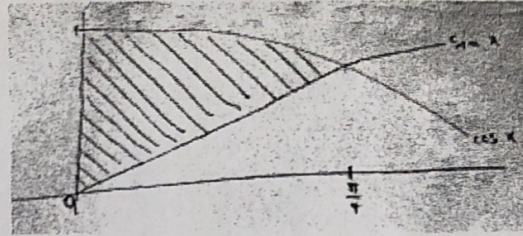


3.6 Interpreting Functions

A Practice Understanding Task

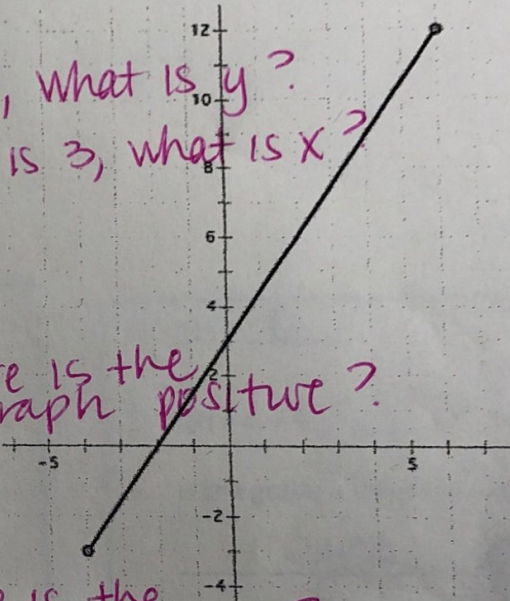


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Given the graph of $f(x)$, answer the following questions. Unless otherwise specified, restrict the domain of the function to what you see in the graph below. Approximations are appropriate answers.

1. What is $f(2)$? 6
2. For what values, if any, does $f(x) = 3$? $x = 0$
3. What is the x-intercept? $(-2, 0)$
4. What is the domain of $f(x)$? $x \in (-4, 6)$
5. On what intervals is $f(x) > 0$? $(-2, 6)$
6. On what intervals is $f(x)$ increasing? $(-4, 6)$
7. On what intervals is $f(x)$ decreasing? $none$
8. For what values, if any, is $f(x) > 3$? $(0, 6)$

if x is 2, what is y?
if y is 3, what is x?
where is the graph positive?
where is the graph above y=3?



Consider the linear graph of $f(t)$ and the nonlinear graph of $g(t)$ to answer questions 9-14. Approximations are appropriate answers.

9. Where is $f(t) = g(t)$? $t = 2, t = 3$
10. Where is $f(t) > g(t)$? $(-2, 3)$
11. What is $f(0) + g(0)$? $1 + (-5) = -4$
12. What is $f(-1) + g(-1)$? $0 - 4 = -4$
13. Which is greater: $f(0)$ or $g(-3)$? $g(-3)$
14. Graph: $f(t) + g(t)$ from $[-1, 3]$

see graph

