

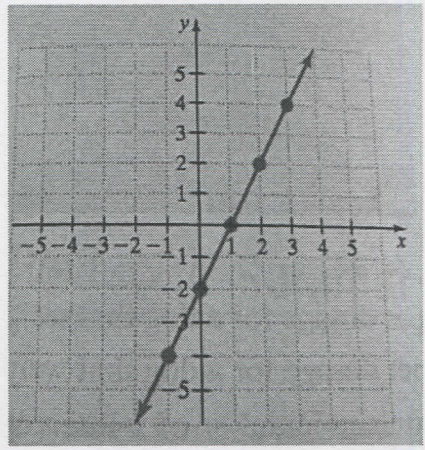
8.2 Function Notation & Graphing Nonlinear Functions DAY ONE CYU

Use when you get it right all by yourself  
*S* Use when you did it all by yourself, but made a silly mistake  
*H* Use when you could do it alone with a little help from teacher or peer  
*G* Use when you completed the problem in a group  
*X* Use when a question was attempted but wrong (get help)  
*N* Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED

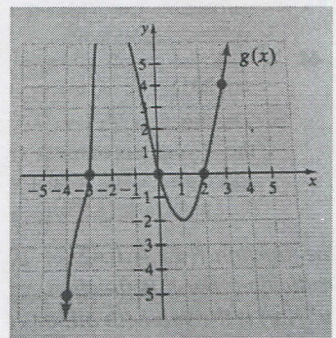
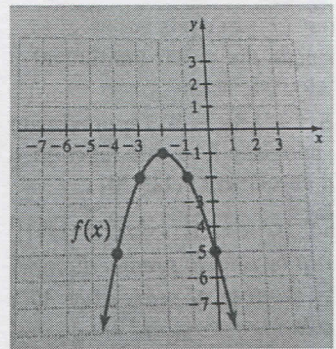
Use the graph of the following function  $f(x)$  to find each value.

- 1)  $f(1) = 0$       2)  $f(0) = -2$       3)  $f(-1) = -4$
- 4)  $f(2) = 2$       5)  $f(x) = 4 \Rightarrow x = 3$       6)  $f(x) = -6 \Rightarrow x = -2$



Use the graph of the functions provided to answer the following questions.

- 7) If  $f(1) = -10$ , then write the corresponding ordered pair.  $(1, -10)$
- 8) If  $g(4) = 56$ , then write the corresponding ordered pair.  $(4, 56)$
- 9) Find  $f(-1) = -2$       10) Find  $f(-2) = -1$
- 11) Find  $g(2) = 0$       12) Find  $g(-4) = -5$
- 13) Find all values of  $x$  such that  $f(x) = -5$ .  $x = -4, 0 = x$
- 14) Find all values of  $x$  such that  $g(x) = 0$ .  $x = -3, 0, 2$





Find the following roots.

15)  $\sqrt{49}$

7

16)  $\sqrt{144}$

12

17)  $-\sqrt{\frac{4}{9}}$

$-\frac{2}{3}$

18)  $-\sqrt{\frac{4}{25}}$

$-\frac{2}{5}$

19)  $\sqrt{64}$

8

20)  $\sqrt{4}$

2

21)  $\sqrt{81}$

9

22)  $\sqrt{1}$

1

23)  $\sqrt{-100}$

non-real  
or  
10i

Solve the following equations.

24)  $3(x - 2) + 5x = 6x - 16$

$x = -5$

25)  $5 + 7(x + 1) = 12 + 10x$

$x = 0$

26)  $3x + \frac{2}{5} = \frac{1}{10}$

$x = -\frac{1}{10}$

27)  $\frac{1}{6} + 2x = \frac{2}{3}$

$x = \frac{1}{4}$

**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

