

I can use function notation to evaluate a function.

The functions $f(x)$, $g(x)$, and $h(x)$ are defined below. Simplify your answers.

$$f(x) = x \quad g(x) = 5x - 12 \quad h(x) = x^2 + 6x - 7$$

Calculate the indicated function values. Show your work.

1. $f(10)$

2. $f(-2)$

3. $f(a)$

4. $f(a + b)$

5. $g(10)$

6. $g(-2)$

7. $g(a)$

8. $g(a + b)$

9. $h(10)$

10. $h(-2)$

11. $h(a)$

12. HONORS ONLY
 $h(a + b)$

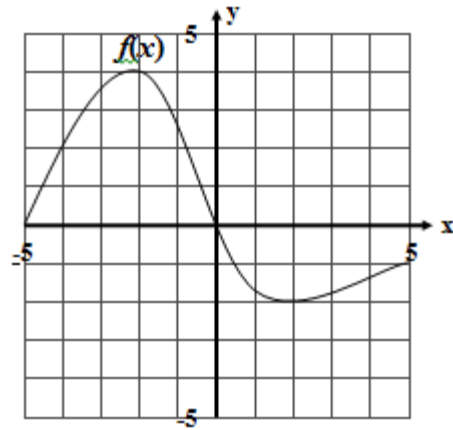
13. Find x if $f(x) = 3$.

14. Find x if $g(x) = 8$.

15. Find x if $h(x)=0$.

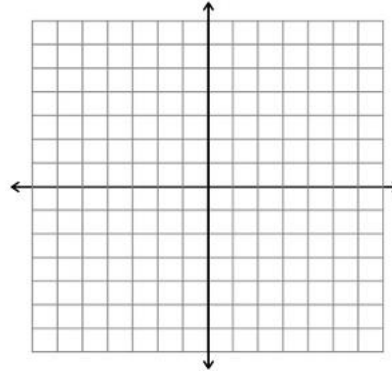
13. Use the graph of $f(x)$ on the right to find the following:

- a) $f(-4)$
- b) $f(0)$
- c) $f(2)$
- d) Find x when $f(x) = 2$.
- e) Find x when $f(x) = -1$.



14. Rewrite the following as coordinate points, then plot them!

- a) $f(-1) = 1$
- b) $f(2) = 7$
- c) $f(1) = -1$
- d) $f(3) = 0$



15. Swine flu is attacking Porkopolis. The function below determines how many people have Swine Flu where t = time in days and S = the number of people in thousands.

$$S(t) = 9t - 4$$

- a) Find $S(4)$
- b) What does $S(4)$ mean?
- c) Find t when $S(t) = 23$.
- d) What does $S(t) = 23$ mean?

16. Given $g(x) = 4x + 6$ and $h(x) = 0.25x - 1.5$, find the following:

- a) $g(-1)$
- b) $h(2)$
- c) $g(a)$
- d) $h(4a + 6)$
- e) What do you notice about parts a & b and parts c & d? What does that tell you about $g(x)$ and $h(x)$?

