

1. Evaluate $f(-2)$ if $f(x) = 4 - 3x^2$.

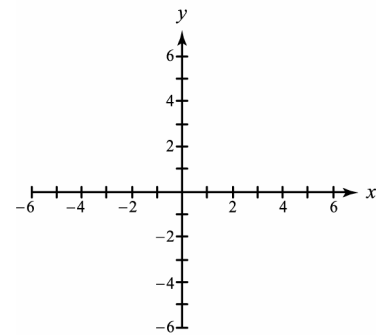
1. _____

2. Write a symbolic representation (formula) for a function S that calculates the number of seconds in x minutes. Evaluate $S(4)$ and interpret your result.

2. _____

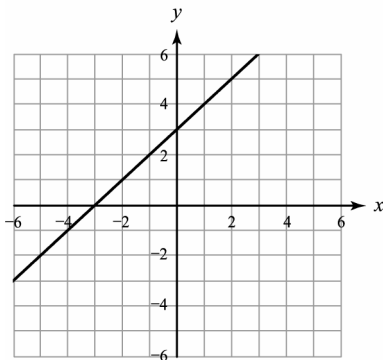
3. Sketch a graph of $f(x) = x^2 - 2$.

3.



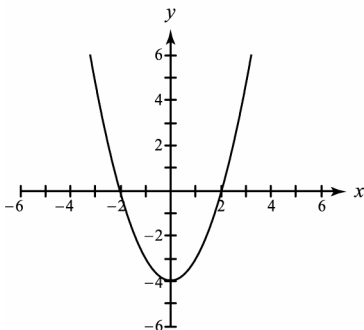
4. Use the graph of f to evaluate $f(-1)$.

4. _____



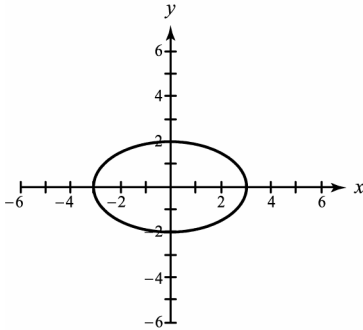
5. Determine the domain and range of f .

5. _____



6. A function f is represented verbally by “Square the input x and then add 3.” Give a symbolic representation of f . 6. _____

7. Determine whether the graph represents a function. 7. _____

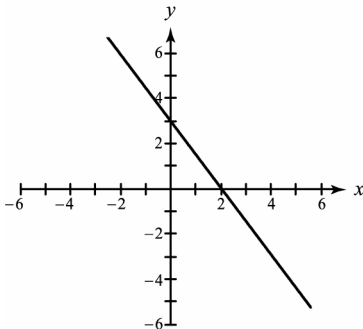


8. Find the domain of $f(x) = \frac{3}{4}x + 7$. 8. _____

9. Find the slope and y-intercept of the graph of $y = 3x - \frac{5}{2}$. 9. _____

10. Find the slope of the line passing through $(\frac{1}{2}, -2)$ and $(0, -3)$. 10. _____

11. Determine the slope of the line shown in the graph. 11. _____



12. Write the slope-intercept form of a line with x -intercept -2 and y -intercept $\frac{3}{2}$. 12. _____

13. Write the slope-intercept form of the line passing through $(1,3)$ and $(\frac{1}{2},1)$. 13. _____

14. Let f be a linear function. Find the slope of the graph of f . 14. _____

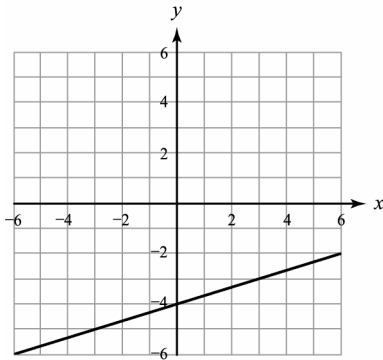
x	-4	-2	-1	0	1
$f(x)$	-6	0	3	6	9

15. Let f be a linear function. Find the x - and y -intercepts of the graph of f . 15. _____

x	-2	0	1	2	3
$f(x)$	8	4	2	0	-2

16. Give the slope-intercept form of a line parallel to $y = 5 - 4x$, passing through $(\frac{1}{2},1)$. 16. _____

17. Find the slope-intercept form for the line shown in the graph. 17. _____



18. Use the graph in #17 to find the equation of a line that passes through the origin and is perpendicular to the given line. 18. _____

19. Find an equation of the vertical line passing through the point $\left(\frac{1}{2}, -\frac{3}{4}\right)$. 19. _____

20. Find an equation of the horizontal line passing through the point $\left(-\frac{2}{3}, 1\right)$. 20. _____