

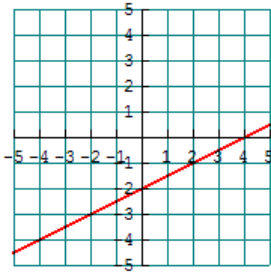
1. $C = 2 + .05n$

2. YES it is a function. $D = \{2, 3, 4\}$ $R = \{1, 2\}$

3. (a) $D = [-4, \infty)$ $R = [0, \infty)$ and (b) $D = (-\infty, 3) \cup (3, \infty)$ $R = (-\infty, 0) \cup (0, \infty)$

4. $c = 5$

5.



Graph $y = \frac{1}{2}x - 2$ x-intercept: $(4, 0)$ y-intercept: $(0, -2)$

6. Choice **c**.

7. $y = \frac{1}{3}$ (function is $y = \frac{12}{x^2}$)

8. $y = -6$ (function is $y = \frac{2}{7}x$)

9. $y = 1,000$ (function is $y = \frac{1}{30}x$) Note: $y = tax = 400$ and $x = assessed\ value = 12,000$

10. (a) 22 (b) $\frac{5}{6}$ (c) $-2a - 6$

11. $2x + h + 2$

12. (a) 3 (b) -4 (c) $D = (-\infty, \infty)$ (d) $R = \{-4\} \cup [3, \infty)$ (e)

13. (a) $D = (-\infty, \infty)$

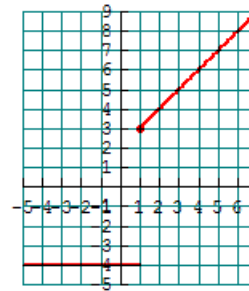
(b) $R = (-\infty, 4]$

(c) $-2 \leq x \leq 2$ OR $[-2, 2]$

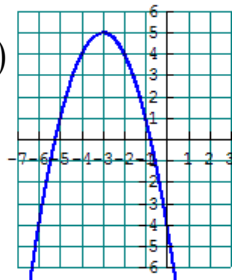
(d) $(-\infty, -2) \cup (2, \infty)$ OR $x < -2$ and $x > 2$

(e) $x = -2$ and $x = 2$

(f) $f(0) = 4$



14. Maximum: $(-3, 5)$



y-intercept: $(0, -4)$

15. $\{-\frac{5}{3}, 3\}$ OR $x = -\frac{5}{3}$ and $x = 3$

16. $-15 < x < 3$ OR $(-15, 3)$

17. $x \leq -1$ or $x \geq -\frac{1}{3}$ OR $(-\infty, -1] \cup [-\frac{1}{3}, \infty)$

18. $d = 10$

19. $A = 85\pi$

20. $m = .05$ The shipping cost goes up \$.05 (5 cents) for each additional oz. of weight.

21. (a) $m = 0$ (b) $m = undefined$ (c) $\frac{3}{4}$