

SM3H 2.1 odd answers

1. function
3. function
5. function, Domain: $\{-1, 0, 1, 2, 8\}$, Range: $\{-3, -2, 2, 3\}$
7. not a function
9. -4
- 9b. 1
- 9c. -3
- 9d. $3x^2 - 2x - 4$
- 9e. $-3x^2 - 2x + 4$
- 9f. $12x^2 + 4x - 4$
11. $t \approx 32.057$ Newtons
13. $(-\infty, \infty)$
15. $(-\infty, -4) \cup (-4, 4) \cup (4, \infty)$
17. $(-\infty, 4]$
19. $\left[-\frac{3}{4}, \infty\right)$
- 21a. $2x^2 + x - 1$ D:
 $(-\infty, \infty)$
- 21b. $-2x^2 + x - 1$ D:
 $(-\infty, \infty)$
- 21c. $2x^3 - 2x^2$ D: $(-\infty, \infty)$
- 21d. $\frac{x-1}{2x^2}$ D: $(-\infty, 0) \cup$
 $(0, \infty)$
- 21e. 20
- 21f. -29
- 21g. 8
- 21h. 0
- 23a. the age of a person in
the population, lowest
number is 0
- 23b. There are 197.34
million Americans who are
20 years old.
- 23c. There are 290.580
million American who are 0
years old or older.
25. $3(5x + 11y^3)(5x - 11y^3)$
27. $(x + 2)(x - 2)(x^2 + 4)$
29. $(11, -6)$