

### 1.3 Homework Odd Answers: PreCalculus

1. e

3. j

5. i

7. k

9. d

11. l

13 Ex. 8

15. Ex. 7, 8

17. Ex. 2, 4, 6, 10, 11, 12

19.  $y = x, y = x^3, y = \frac{1}{x}, y = \sin x$

21.  $y = x^2, y = \frac{1}{x}, y = |x|$

23.  $y = e^x, y = \frac{1}{x}, y = \frac{1}{(1+e^{-x})}$

25.  $y = \cos x, y = x^3, y = \frac{1}{x}, y = \sin x, y = \frac{1}{(1+e^{-x})}$

27.  $y = x, y = x^3, y = \frac{1}{x}, y = \sin x$

29. Domain: all reals; Range:  $[-5, \infty)$

31. Domain:  $(-6, \infty)$  ; Range: all reals

33. Domain: All reals ; Range: all integers

35. a.) Increasing on  $[10, \infty)$  b.) Neither; c) Minimum value of 0 at  $x = 10$ ; d.) Square root function shifted 10 units to the right

39. a.) Increasing on  $[0, \infty)$ ; decreasing on  $(-\infty, 0]$ ; b.) Even; c) Minimum value of -10 at  $x = 0$ ; d.) Absolute value function shifted 10 units to down