pgs. 152-153 (1-10, 11-15, 25, 26, 33, 41-44) 9/7/16

1. d.) quadratic, left 2, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

2. f.) absolute value, right 2, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

3. i.) exponential, down 1, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to -1$

4. h.) sine/trig, flipped, 

5. b.) quadratic, up 1, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

6. j.) cosine/trig, up 1, 

7. g.) absolute value, left 2, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

8. c.) quadratic, right 2, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

9. a.) quadratic, down 1, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to \infty$

10. e.) linear, stretch 1/2, down 1/2, as $x \to \infty$, $f(x) \to \infty$; as $x \to -\infty$, $f(x) \to -\infty$

11. D: $(-\infty, \infty)$ R: $(-\infty, \infty)$

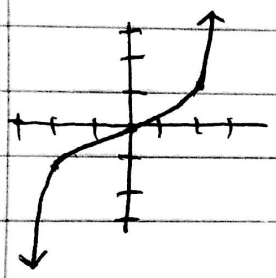
12. D: $(-\infty, \infty)$ R: $(-\infty, \infty)$

13. D: $(-\infty, \infty)$ R: $[0, \infty)$

14. D: $(-\infty, \infty)$ R: $[5, \infty)$

15. D: $(-\infty, \infty)$ R: $[8, \infty)$

25.

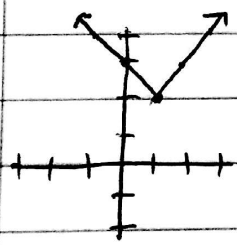


x	f(x)
-2	-4/3
0	0
2	4/3

int. inc.: $(-\infty, \infty)$

int. dec.: /

26.



int. inc.: $(1, \infty)$

int. dec.: $(-\infty, 1)$

33. min: $(-1, -7)$

41. $x = 2y + 3$

$x - 3 = 2y$

$\frac{x-3}{2} = f^{-1}(x)$

42. $x = \sqrt[3]{y-8}$

$x^3 = y - 8$

$x^3 + 8 = f^{-1}(x)$

43.) $x = 2/y$

$\frac{x}{1} = \frac{2}{y}$

$xy = 2$

$y = 2/x$

$f^{-1}(x) = 2/x$

44.) $x = \frac{6}{y+4}$

$\frac{x}{1} = \frac{6}{y+4}$

$x(y+4) = 6$

$y + 4 = \frac{6}{x}$

$y = \frac{6}{x} - 4$

$f^{-1}(x) = \frac{6}{x} - 4$