

**EXTRA PRACTICE FOR CH. 2 TEST**

Review pp. 253-256 in TEXT BOOK.

→ 68 = FIND MAX, MIN, AND ZERO.

MAX (0.131, -0.935) ZERO: (3.806, 0)  
 MIN (2.535, -7.879)

2abcd.  $L_2$   $L_3$   $L_4$

24.  $y = \frac{3}{2}x + 2$

28ab a)  $y = -\frac{2}{3}x - \frac{7}{3}$

b)  $y = \frac{3}{2}x + 15$

38. No

50ab a)  $C(x) = 5 - 35x + 16,000$

b)  $P(x) = R - C = 2.85x - 16,000$

56. FUNCTION

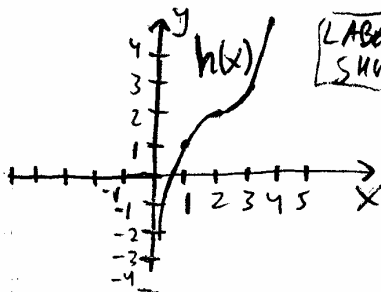
58. NOT A FUNCTION

64. INCREASING:  $-2 < x < 0$ ,  $x > 2$   
 DECREASING:  $x < -2$ ,  $0 < x < 2$   
 ZERO SLOPE AT  $x = -2$ ,  $x = 0$ ,  $x = 2$ .

74. EVEN

92.  $y = \sqrt{x}$

94abcd. **AND** MAKE TABLES FOR  $h(x)$  AND  $h^{-1}(x)$ .



a) PARENT:  $x^3 = f(x)$

b) SUBTR. 2, CUBE, ADD 2.

d)  $h(x) = f(x-2) + 2$

x	h(x)	x	h <sup>-1</sup> (x)
0	-6	-6	0
1	1	1	1
2	2	2	2
3	3	3	3
4	10	10	4

108. abcd

a)  $x^2 - 4 + \sqrt{3-x}$  d)  $\frac{x^2-4}{\sqrt{3-x}}$

b)  $x^2 - 4 - \sqrt{3-x}$

c)  $(x^2-4)\sqrt{3-x}$

all real #'s  
 such that  
 $x < 3$   
 Domain.

110ab.

a)  $x+3$

b)  $\sqrt[3]{x^3+3}$

Domains of f, g, f(g), g(f) are all real #'s.

120. INVERSE IS NOT A FUNCTION  
 FAILS HORIZONTAL LINE TEST



124abcd

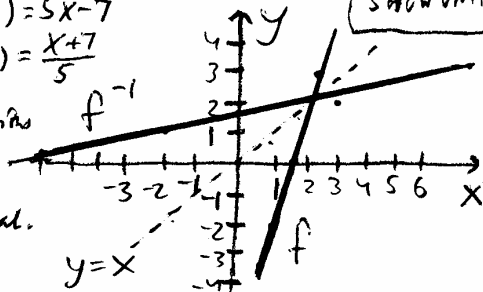
f(x) = 5x - 7

a)  $f^{-1}(x) = \frac{x+7}{5}$

c) Reflection about

$y = x$ .

d) All real.



52. a)  $f(x) = 0.4(50-x) + x = 20 + 0.6x$

b) Domain:  $0 \leq x \leq 50$ , Range:  $20 \leq y \leq 50$ .

c)  $8 \frac{1}{3}$  LITERS