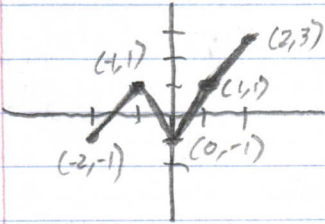


- 9) $F(x) = (x-2)^3$ 13) $F(x) = 1-\sqrt{x}$
 10) $F(x) = \frac{1}{2}x$ 14) $F(x) = |x+2|$
 11) $F(x) = -x^2$
 12) $F(x) = 7$

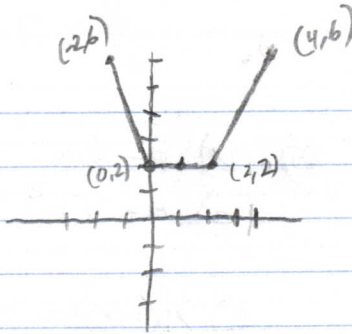
Advanced Math
Pg 169

9-14 all
 16-18 all
 22-38 every 4th
 52-62 even
 63-70 all

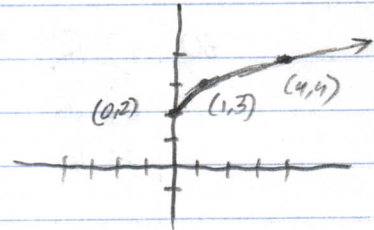
16



17)



18)



- 22) a) $F(x)+g(x) = 2x$
 b) $F(x)-g(x) = 2x-10$
 c) $F(x) \cdot g(x) = 10x-25$
 d) $\frac{F(x)}{g(x)} = \frac{2x-5}{5}, \mathbb{R}$

26) a) $F(x)+g(x) = \frac{x^4+x^3+x}{x+1}$ b) $F(x)-g(x) = \frac{-x^4-x^3+x}{x+1}$

c) $F(x) \cdot g(x) = \frac{x^4}{x+1}$ d) $\frac{F(x)}{g(x)} = \frac{x}{x^4+x^3}, \mathbb{R} \text{ except } \{0, -1\}$

or $\frac{1}{x^3+x^2}$

- 30) -1 34) -370 38) 52

- 52) a) x
 b) x
 c) $\sqrt[3]{3x-1} - 1$

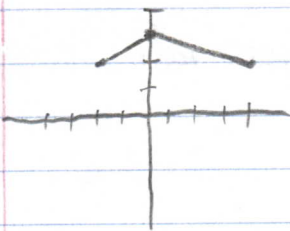
- 54) a) $\frac{1}{x^3}$
 b) $\frac{1}{x^3}$
 c) x^9

- 56) a) x
 b) x

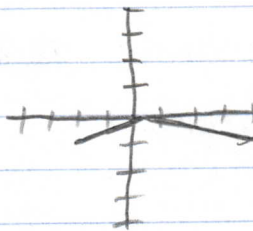
- 58) a) x^{16}
 b) x^{16}

- 60) a) $4x-9$ 62) a) x^4 63) a) 3 64) a) -1 65) a) 0 66) 2
 b) $4x-9$ b) x^4 b) 0 b) 0 b) 4 b) 2

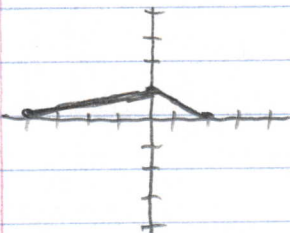
67)



68)



69)



70)



78) a) \mathbb{R} except $\{0\}$

b) \mathbb{R}

c) \mathbb{R} except $\{3\}$

80) a) \mathbb{R}

b) \mathbb{R}

c) \mathbb{R}

85) a) $r = \frac{1}{2}x$ 3) 487

b) $A = \pi r^2$ 35

$$c) A(r(x)) = \pi \left(\frac{1}{2}x\right)^2 = \frac{\pi x^2}{4}$$

It is area based on the length of the square.

$$86) A(r(t)) = \pi (.6t)^2 = .36\pi t^2$$

Area as a function of time

$$87) C(x(t)) = 60(50t) + 750 = 3000t + 750$$

Cost as a function of time

88) b) $g(F(x))$

$F(x)$ Figures amt over \$500,000. Needs to be done first
 $g(x)$ Finds the bonus

$$89) a) R(p) = p - 1200$$

$$b) S(p) = .92p$$

c) $R(S(p))$ is discount figured before rebate
 $S(R(p))$ is discount after rebate

d) $R(S(p))$ because it is 92% of a bigger value.
\$15729