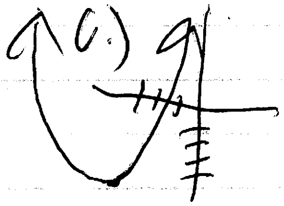
Hannah Wilson
Landen Thieman
p.437 - 25, 29, 35
41, 48

25. A) $(x-3)^2-9$

$(x+3))(x-3)$

B) $(-3,-9)$

C.)



$x^2-6x\underbrace{+9-9}_{0}$

29. A) $2x^2+4x+3$

$2(x+2)^2-1$

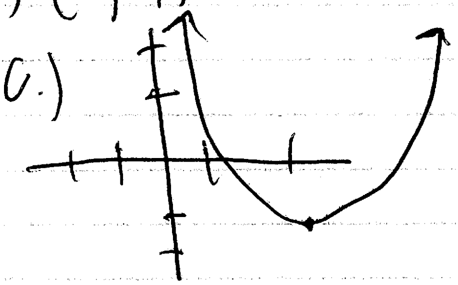
$x+2 \quad x+2$

x^2+4x+4

x^2+2x

B.) $(2,-1)$

C.)



35. ~~$y=a(x+2)^2-3$~~

$y=(x+2)^2-3$

41. $y=(x+2)^2+6$

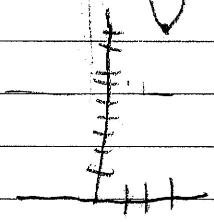
48. $(30,46)$

$y=(x-30)+46$

25, 29, 35
41, 48

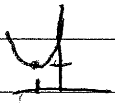
Chase
Jackson
Lindy

25. $(x-3)^2+9 \quad V=(3,9)$ $\quad (x-3)(x-3)$



29. $2(x^2+2x+\frac{3}{2})$

$2(x+1)^2+1$

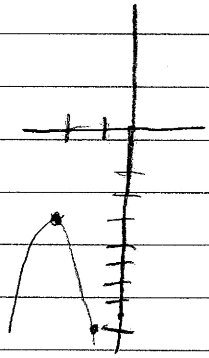


35. $(-8)=a(-1+2)^2-3$

$-8 \;\; 2 = 2a$

$4. = a$

$= -5(x+2)^2-3$



Brendon
Taylor

P 387

67, 69, 79, 81, 83

67. $f(x) = e^{.5x}$

$y = e^{.5x}$

$x = e^{.5y}$

$\ln x = \ln e^{.5y}$

$\ln x = .5y \ln e$

e

$\boxed{\frac{\ln x}{.5} = f^{-1}(x)}$

69. $f(x) = \ln(x-3)$

$y = \ln(x-3)$

$e^{x} = e^{\ln(y-3)}$

$e^{x} = y-3$

$e^{x}+3 = y$

$\boxed{f(x) = e^{x}+3}$

79. a = $g(x) = \frac{x}{30}$

b = $f(x) = 19x$

c = $\frac{19x}{30}$

81. a = $f(x) = .15x$

b: $g(x) = x - 1{,}000$

c = $H(x) = .15x - 1000$

D = $H^{-1}(x) = \frac{x+1000}{.15}$

E = 93,333.33

represents original price w/o discounts.

$x = .15y - 1000$

$\frac{x+1000}{.15} = y$

83. a $x = 846.3(1.031)^y$

$\ln \frac{x}{846.3} = \ln 1.031^y$

$\ln \frac{x}{846.3} = y \cdot \ln 1.031$

$\ln \frac{x}{2813} = y \cdot \frac{1.031}{.031}$

$$\boxed{\frac{\ln \frac{x}{846.3}}{.036} = f^{-1}(x)}$$

b = ~~1998~~ 1999

aina Shoemaker
tacy Beller
aran Larkins

#25) $f(x) = x^2 - 6x$

$(x-3)(x-3)$ FOIL $(\overset{h}{x-3})^2 \overset{k}{-9}$

$x^2 - 3x - 3x + 9$

$x^2 - 6x + 9 \quad -9$ (h, k) = vertex

$x^2 - 6x$ $(3, -9)$

#29) $f(x) = 2x^2 + 4x + 3$

$= 2(x^2 + 2x + 3/2)$

$= 2(x+1)^2$

$(x+1)(x+1)$ FOIL

$x^2 + 1x + 1x + 1$ $2/2$

$(x^2 + 2x + 1) \underbrace{-1 + 3/2}_{\frac{1}{2}}$

$2((x+1)^2 + \frac{1}{2})$

$2(x+1)^2 + 1$

(h, k) = vertex

$(-1, 1)$

#35)

*Friday - Math - Smith Curtis 122

chapter 5 : 5.2

1.) $x^2 + 16x + 24$

$(x+8)^2 - 40$ ← complete the square (add and subtract $b/2$)

$(x+8)(x+8)$ [illegible]

$x^2 + 8x + 8x + 64$

$x^2 + 16x + 64 - 40$

$x^2 + 16x + 24$

2.) vertex = (h, k)

$f(x) = a(x-h)^2 + k$

$f(x) = (x+8)^2 + 40$

$(-8, -40)$

1.) $-x^2 + x + 2$

$-[x^2 - x - 2]$ factor a

$-[x^2 - x + \frac{1}{4} - \frac{1}{4} - 2]$

$-[(x - \frac{1}{2})^2 - 9/4] \rightarrow -(x - \frac{1}{2})^2 + 9/4$

$(x - \frac{1}{2})(x - \frac{1}{2})$ FOIL

$(x^2 - \frac{1}{2}x - \frac{1}{2}x + \frac{1}{4})$

1.) $y = a(x-h)^2 + k$

vertex at (h, k)

$(-1, -2)$

$y = a(x - (-1))^2 + (-2)$

$= a(x+1)^2 - 2$

Another point of data $(0, -4)$

$-4 = a(0+1)^2 - 2$

$-4 = a(0^2 + 1^2) - 2$

$-4 = a(0+1) - 2$

$-4 = 0 + a - 2$

$+2 \qquad +2$

$-2 = a \longrightarrow y = -2(x+1)^2 - 2$

p.437 #25, 29, 35, 41, 48

$y = a(x-h)^2 + k$ $\left(\frac{b}{2}\right)^2$

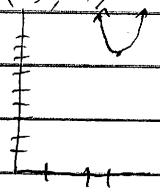
Jerry Lunning, Markeese   p. 437 # 25, 29, 35, 41, 48

(25) a) $x^2 - 6x$

$(x-3)^2 + 9$

b) $(3, 9)$

c)

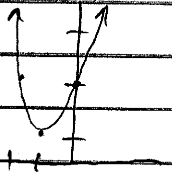


(29) a) $f(x) = 2x^2 + 4x + 3$

$2(x+1)^2 + 1$

b) $(-1, 1)$

c)



(35) $y = a(x+2)^2 - 3$

$-8 = a(-1+2)^2 - 3$

$a = 4$

$y = 4(x+2)^2 - 3$

(41) $y = a(x+2)^2 + 5$

$1 = a(0+2)^2 + 5$

$-4 = a(4)$

$-1 = a$

$y = -(x+2)^2 + 5$

(48) $y = a(x-30)^2 + 45$

$0 = a(60-30)^2 + 45$

$-945 = a$

$y = -945(x-30)^2 + 45$