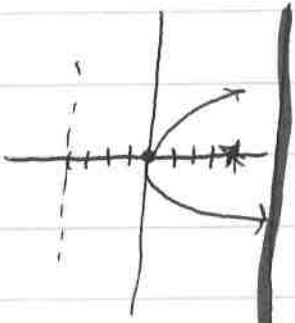
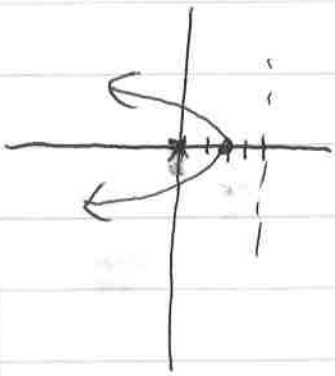
Pg 801 # 13-16

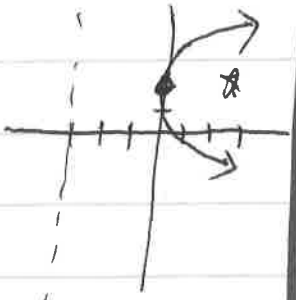
(13) V(0,0)
F(4,0)
D: x=-4
p = 4
$x^2 = 16x$



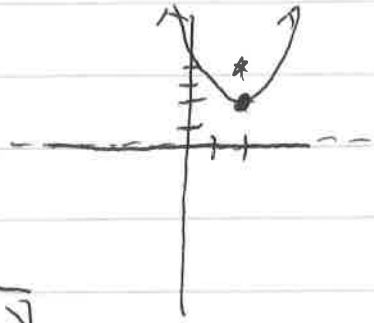
(14) V: (2,0)
F(0,0)
D: x=4
p = -2
$x^2 = -8(x-2)$



(15) V: (0,2)
D: x=-3
F: (3,2)
p = 3
$(y-2)^2 = 12x$

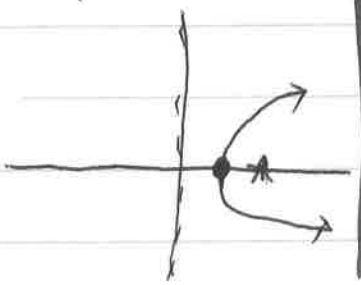


(15) V: (2,2)
D: y=0
F: (2,4)
p = 2
$(x-2)^2 = 8(y-2)$



Pg 805 # 4, 6, 7

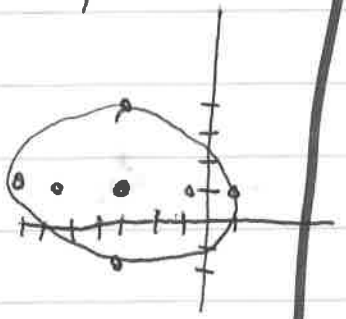
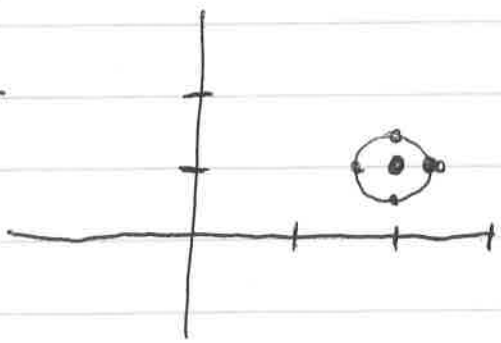
(4) $y^2 = 4x - 4$
$y^2 = 4(x-1)$
V: (1,0)
F: (2,0)
D: x=0
p = 1



(6) $9x^2 + 54x + 16y^2 - 32y = 47$
$9(x^2+6x+9) + 16(y^2-2y+1) = 47 + 81 + 16$
$\frac{9(x+3)^2}{144} + \frac{16(y-1)^2}{144} = \frac{144}{144}$
$\frac{(x+3)^2}{16} + \frac{(y-1)^2}{9} = 1$

Center: (-3,1)
V: (-7,1)(1,1)
F: $(-3 \pm \sqrt{7}, 1)$
a = 4
b = 3
c = $\sqrt{7}$

$9 + c^2 = 16$
$c^2 = 7$



(7) $2x^2 - 8x + 2y^2 - 4y = -9$
$2(x^2-4x+4) + 2(y^2-2y+1) = -9 + 8 + 2$
$2(x-2)^2 + 2(y-1)^2 = 1$
$(x-2)^2 + (y-1)^2 = \frac{1}{2}$
Center: (2,1)
$r = \frac{1}{\sqrt{4}}$