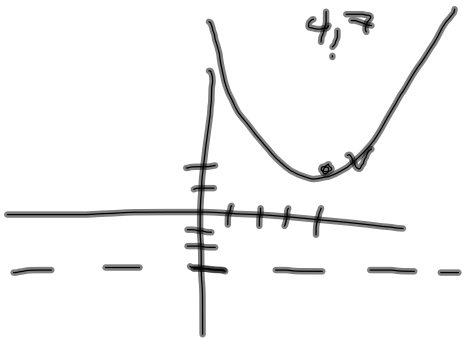
5, 4, 6, 1, 3

1. V(4, 2)

D: y = -3

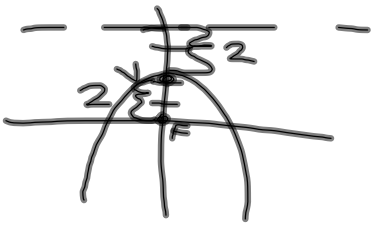
F: (4, 7)



3. V(0, 2)

F(0, 0)

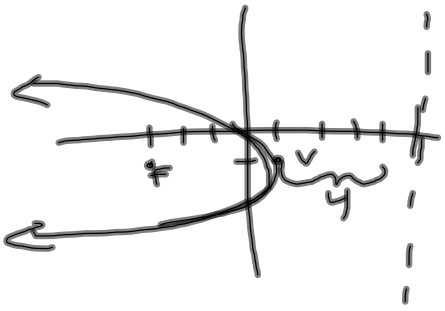
y = 4



4. F(-3, -1)

V(1, -1)

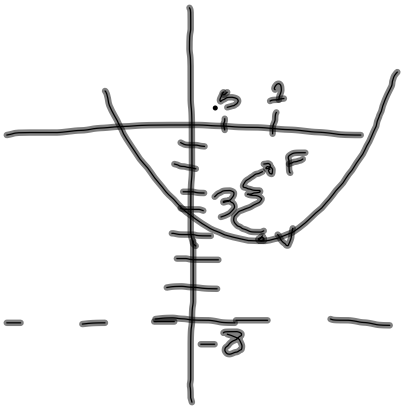
D: x = 5



5. F(1, -2)

V: (1, -5)

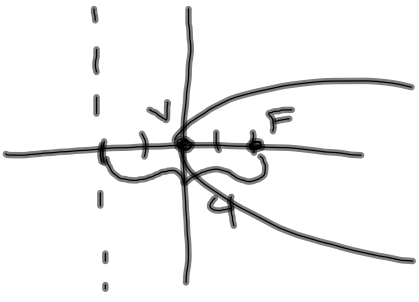
y = -8



6. D: x = -2

F: (2, 0)

V: (0, 0)



HW Assessment
5/3/10

2. D: $y = 2$
V: $(2, 4)$
find the coordinates of the focus.

Quiz Corrections

parabolic form:
$y \pm c = a(x \pm b)^2$

quadratic form:
$y = ax^2 + bx + c$

$y - 7 = \frac{1}{2}(x+3)^2$

1. a) parabolic form

b) opens up because $\frac{1}{2} > 0$

c) $(-3, 7)$

d) y-intercept : $x = 0$

$y - 7 = \frac{1}{2}(0+3)^2$

$y - 7 = \frac{1}{2}(3)^2$

$y - 7 = \frac{1}{2}(9)$

$y - 7 = 4.5$

$+7 \quad +7$

$y = 11.5$ $(0, 11.5)$

e) x-intercepts $y = 0$

because the math is hard, I like to graph the EQ first.

$y - 7 = \frac{1}{2}(x+3)^2$

$+7 \quad +7$

$y = \frac{1}{2}(x+3)^2 + 7$

$0 - 7 = \frac{1}{2}(x+3)^2$

$2(-7) = \left(\frac{1}{2}(x+3)^2\right)2$

$\sqrt{-14} = \sqrt{(x+3)^2}$

$x + 3 = \pm 3.74\,i$ ← imaginary AKA DOES NOT CROSS X-AXIS

$x = -3 \pm 3.74\,i$