

9.5 – EQUATIONS OF PARABOLAS

OBJECTIVE:

- 1) Write equations of parabolas in conics form.

Write the equation in standard form and graph.

1) $0 = -4x - y^2 + 4y - 8$

$$(y-2)^2 = -4(x+1)$$

vertex: $(-1, 2)$

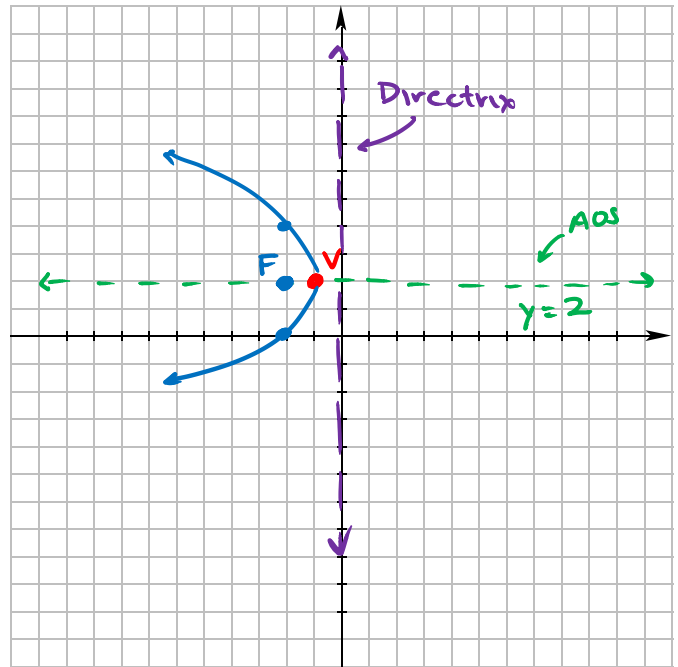
$p = 1$

Foci: $(-2, 2)$

Points: $(-2, 4)$
 $(-2, 0)$

AOS: $y = 2$

Directrix: $x = 2$



WRITE EQUATIONS IN CONICS FORM

2) vertex $(8, 6)$ and focus $(2, 6)$

3) vertex $(1, 7)$ and directrix $y = 3$

4) focus $(-4, -6)$ and directrix $y = -2$