

Partial solutions for 1 2 11 13 19

1. $p = 3/2$. Vertex is $(0,0)$, focus is $(0, 3/2)$. Directrix is $y = 3/2$.
2. $p = -1/2$. Vertex is $(0,0)$. Focus is $(-1/2, 0)$. Directrix is $x = 1/2$.
11. Ellipse centered at $(0,0)$. Vertices are $(0, \pm 2)$ and $(\pm\sqrt{2}, 0)$. Foci are $(0, \pm\sqrt{2})$
13. Ellipse centered at $(0, 0)$. Vertices are $(\pm 3, 0)$ and $(0, \pm 1)$. Foci are $(\pm 2\sqrt{2}, 0)$.
19. Hyperbola. Centered at $(0, 0)$. Vertices are $(0, \pm 5)$. Foci $(0, \pm\sqrt{34})$. Asymptotes are $y = \pm\frac{5}{3}x$.