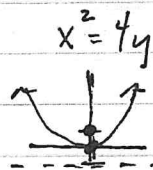
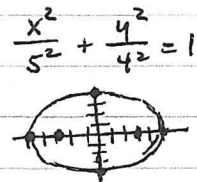


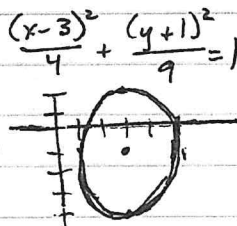
1. $V(0,0)$
DIRECTRIX $y = -1$
 $F(0,1)$



8. $C(0,0)$
 $V(\pm 5,0)$
 $F(\pm 3,0)$



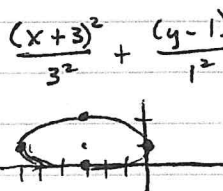
2. $C(3,-1)$
 $V(3,2) (3,-4)$
 $F(3, -1+\sqrt{5}) (3, -1-\sqrt{5})$



9. $V(0,1)$ $x^2 = 4(-1)(y-1)$
DIRECTRIX $y = 2$
 $F(0,0)$



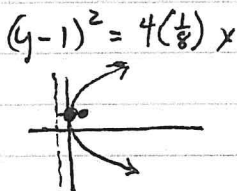
3. $C(-3,1)$
 $V(-6,1) (0,1)$
 $F(-3-2\sqrt{2}, 1) (-3+2\sqrt{2}, 1)$



10. $C(0,0)$ $-\frac{x^2}{3^2} + \frac{y^2}{(\sqrt{3})^2} = 1$
 $V(\pm 3, \pm \sqrt{3})$
 $y = \pm \frac{\sqrt{3}}{3}x$



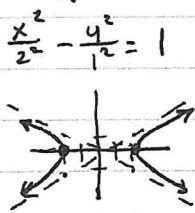
4. $V(0,1)$
DIRECTRIX $x = -\frac{1}{8}$
 $F(\frac{1}{8}, 1)$



11. $C(2,-1)$ $\frac{(x-2)^2}{3^2} + \frac{(y+1)^2}{2^2} = 1$
 $V(-1,-1) (5,-1)$
 $F(2-\sqrt{5}, -1) (2+\sqrt{5}, -1)$



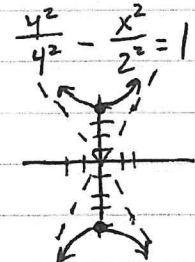
5. $C(0,0)$
 $V(\pm 2,0)$
 $y = \pm \frac{1}{2}x$



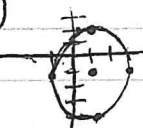
12. $V(2,-1)$ $(x-2)^2 = 4(-1)(y+1)$
DIRECTRIX $y = 0$
 $F(2,-2)$



6. $C(0,0)$
 $V(\pm 4, \pm 4)$
 $y = \pm 2x$



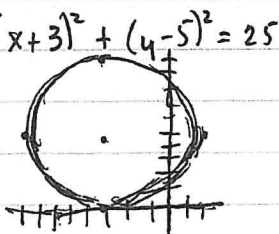
13. $C(1,-1)$ $\frac{(x-1)^2}{2^2} + \frac{(y+1)^2}{3^2} = 1$
 $V(1,2) (1,-4)$
 $F(1, -1+\sqrt{5}) (1, -1-\sqrt{5})$



14. $C(1,1)$ $(x-1)^2 + (y-1)^2 = 3$
 $r = \sqrt{3}$

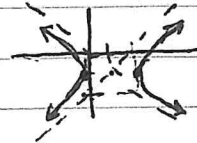


7. $C(-3,5)$
 $r = 5$



15. $C(1, -1)$
 $\sqrt{(0, -1)(2, -1)}$
 $y = \pm(x-1) - 1$

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



16. $C(-1, 1)$
 $\sqrt{(-1, 2)(-1, 0)}$
 $y = \pm(x+1) + 1$

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



17. $(-3, -4)$
 $(4, 3)$

$$x - y = 1$$

$$x^2 + y^2 = 25$$

$$x = y + 1$$

18. $(-3, 1)$
 $(3, 1)$

$$x^2 + 7y = 16$$

$$3x^2 - 2y = 25$$

$$x^2 = -7y + 16$$

19. $\emptyset$

$$x^2 + y^2 = 8$$

$$16x + 4y^2 = 80$$

$$y^2 = 8 - x^2$$

20. $(-4, -3)$
 $(-4, 3)$
 $(4, -3)$
 $(4, 3)$

$$3x^2 - 2y^2 = 30$$

$$2x^2 + 5y^2 = 77$$