

All Three Conics Worksheet Answer Key

7. $y = -\frac{1}{4}x^2 + 1$ V(0, 1), F((0, 0), D: $y = 2$
9. $\frac{x^2}{2} - \frac{y^2}{8} = 1$ C(0, 0), V($\pm\sqrt{2}$, 0), F($\pm\sqrt{10}$, 0), A: $y = \pm 2x$
11. $y = \frac{1}{2}(x-2)^2 - 2$ V(2, -2), F(2, -3/2), D: $y = -5/2$
13. $\frac{(y-2)^2}{4} - \frac{(x-1)^2}{1} = 1$ C(1, 2), V(1, 0)(1, 4), F(1, $2\pm\sqrt{5}$), A: $y - 2 = \pm 2(x - 1)$
15. $\frac{(x-2)^2}{9} + \frac{(y-1)^2}{4} = 1$ C(2, 1), V(-1, 1)(5, 1), F($2\pm\sqrt{5}$)
17. $y = -\frac{1}{4}(x-2)^2 - 1$ V(2, -1), F(2, -2), D: $y = 0$
21. $x = -\frac{1}{8}y^2$ 26. $\frac{x^2}{4} - \frac{y^2}{12} = 1$ 31. $\frac{(x+4)^2}{16} + \frac{(y-5)^2}{25} = 1$
22. $\frac{x^2}{16} + \frac{y^2}{25} = 1$ 27. $y = -\frac{1}{4}(x-2)^2 - 3$ 32. $\frac{(x-1)^2}{16} - \frac{(y-3)^2}{20} = 1$
23. $\frac{y^2}{4} - \frac{x^2}{12} = 1$ 28. $\frac{(x+1)^2}{9} + \frac{(y-2)^2}{8} = 1$ 33. $\frac{(x+1)^2}{9} - \frac{(y-2)^2}{7} = 1$
24. $y = \frac{1}{12}x^2$ 29. $\frac{(x+2)^2}{1} - \frac{(y+3)^2}{3} = 1$ 34. $\frac{(y+2)^2}{1} - \frac{(x-4)^2}{15} = 1$
25. $\frac{x^2}{16} + \frac{y^2}{7} = 1$ 30. $y = -\frac{1}{4}(x-3)^2 + 7$ 35. $\frac{(x-3)^2}{9} - \frac{(y-1)^2}{4} = 1$
36. $\frac{(y-2)^2}{4} - \frac{(x-4)^2}{1} = 1$