Conics 4 – Parabolas

Graph each of the following parabolas. Be sure to label all important points on the graph.

1. $(x-4)^2 = 12(y-3)$
2. $(x+2)^2 = 16(y-3)$
3. $(x-2)^2 = -12(y+6)$
4. $(y+3)^2 = 20(x+3)$
5. $(y-4) = -12(x-7)$
6. $x^2 = 20y$
7. $(x+5)^2 = 4y$
8. $(x-4)^2 = 8y$
9. $(x-3)^2 = -4y$
10. $(x-3)^2 = 4(y+3)$
11. $(x+3)^2 = 8(y+1)$
12. $(x-8)^2 = 12(y-7)$
13. $y^2 = 8(x-2)$
14. $(x+2)^2 = 8(y-7)$
15. $(x+5)^2 = -8(y-9)$
16. $(x-4)^2 = 12(y-5)$
17. $(y-5)^2 = -4(x-7)$
18. $(y-1)^2 = -4(x+2)$
19. $x^2 = 20(y+3)$
20. $(x-6)^2 = 4(y-6)$
21. $\left(x-\frac{1}{2}\right)^2 = 6(y+3)$
22. $(y-3)^2 = 12(x-4)$
23. $(x+7)^2 = -16(y-2)$
24. $(x-3)^2 = 10(y+7)$
25. $(y+2)^2 = 8(x-4)$
26. $(y+6)^2 = -12(x-3)$
27. $(x+4)^2 = 16(y+3)$
28. $(y+4)^2 = 16(x+3)$
29. $(y-5)^2 = 12(x+3)$
30. $(x+4)^2 = 4(y+4)$
31. $x^2 = y$
32. $y^2 = x$
33. $x^2 = -y$
34. $y^2 = -x$
35. $x^2 = y-4$
36. $x^2 = y+3$
37. $\left(x-\frac{2}{3}\right)^2 = 12\left(y+7\frac{2}{3}\right)$
38. $(x-3)^2 = -14\left(y+2\frac{1}{2}\right)$
39. $(y-7)^2 = 13\left(x+\frac{21}{4}\right)$
40. $\left(y+\frac{2}{3}\right) = -11(x-7)$
41. $\left(x+8\frac{1}{2}\right)^2 = -24\left(y-7\frac{2}{7}\right)$
42. $(y-3)^2 = 48(x+3)$
43. $(x+3.8)^2 = 14.4(y-7.4)$
44. $(y+2.8)^2 = -17.2(x-4.7)$
45. $\left(y+7\frac{2}{9}\right)^2 = -18\frac{1}{4}\left(x-\frac{7}{4}\right)$
46. $\left(x-3\frac{7}{9}\right)^2 = 16\frac{1}{5}\left(y+6\frac{2}{5}\right)$
47. $(x+2.3)^2 = 20.4(y-7.3)$
48. $(y-2.5)^2 = -14.7(x+3)$
49. $(x-2.7)^2 = 30.5(y+13.8)$
50. $(y-7.8)^2 = -1.7(x-3.2)$
51. $\left(y-\frac{1}{2}\right)^2 = 16\frac{2}{9}\left(x-7\frac{2}{5}\right)$
52. $\left(x+3\frac{1}{3}\right)^2 = -27\frac{2}{3}\left(y-4\frac{7}{8}\right)$

