

## Conics 7 - Ellipses

Graph each of the following ellipses and label all important points.

1.  $\frac{x^2}{25} + \frac{y^2}{16} = 1$

2.  $\frac{y^2}{100} + \frac{x^2}{36} = 1$

3.  $\frac{(x+3)^2}{25} + \frac{(y-4)^2}{9} = 1$

4.  $\frac{(y+3)^2}{169} + \frac{(x-2)^2}{144} = 1$

5.  $\frac{(y-4)^2}{169} + \frac{(x-4)^2}{25} = 1$

6.  $\frac{(x+7)^2}{289} + \frac{(y-2)^2}{225} = 1$

7.  $\frac{(x-4)^2}{225} + \frac{(y+2)^2}{81} = 1$

8.  $\frac{(x+3)^2}{225} + \frac{(y-7)^2}{144} = 1$

9.  $\frac{(y-7)^2}{25} + \frac{(x-3)^2}{9} = 1$

10.  $\frac{(x+4)^2}{169} + \frac{(y+4)^2}{25} = 1$

11.  $\frac{(x+3)^2}{64} + \frac{(y-2)^2}{25} = 1$

12.  $\frac{(y-5)^2}{81} + \frac{(x+4)^2}{49} = 1$

13.  $\frac{(y-3)^2}{49} + \frac{(x-4)^2}{4} = 1$

14.  $\frac{(y+3)^2}{25} + \frac{(x-7)^2}{1} = 1$

15.  $\frac{(x+2)^2}{100} + \frac{(y-6)^2}{81} = 1$

16.  $\frac{(x+3)^2}{49} + \frac{(y-9)^2}{13} = 1$

17.  $\frac{(x+1)^2}{36} + \frac{(y-4)^2}{18} = 1$

18.  $\frac{(y+1)^2}{6} + \frac{(x-12)^2}{2} = 1$

19.  $\frac{(x-2)^2}{81} + \frac{(y+1)^2}{8} = 1$

20.  $\frac{(y+3)^2}{100} + \frac{(x-2)^2}{49} = 1$

21.  $\frac{(y-2\frac{1}{4})^2}{36} + \frac{(x+6\frac{2}{3})^2}{25} = 1$

22.  $\frac{(x+3)^2}{96} + \frac{(y-2)^2}{32} = 1$

23.  $\frac{(y-7)^2}{1} + \frac{(x+3)^2}{\frac{16}{25}} = 1$

24.  $\frac{(x-2)^2}{72} + \frac{(y+6)^2}{40} = 1$

25.  $\frac{(x-2\frac{7}{8})^2}{3} + \frac{(y+3\frac{2}{3})^2}{\frac{3}{4}} = 1$

26.  $\frac{(y+3.4)^2}{61} + \frac{(x-2.1)^2}{35} = 1$

27.  $\frac{(x-4\frac{1}{2})^2}{\frac{100}{3}} + \frac{(y-2\frac{3}{5})^2}{\frac{64}{3}} = 1$

28.  $\frac{(y+7)^2}{81} + \frac{(x-2)^2}{29.16} = 1$

29.  $\frac{(y-3.6)^2}{94.09} + \frac{(x-7.8)^2}{42.25} = 1$

30.  $\frac{(x-4\frac{2}{9})^2}{\frac{5329}{1000}} + \frac{(y+5\frac{4}{5})^2}{\frac{576}{25}} = 1$

31.  $\frac{(y+5\frac{7}{9})^2}{79.21} + \frac{(x-4\frac{2}{3})^2}{64} = 1$

32.  $\frac{(y-3\frac{2}{3})^2}{128} + \frac{(x-7\frac{7}{9})^2}{32} = 1$