

Algebra Trig Conic Section Worksheet

A. PARABOLAS

For each of the following:

- put the equation in STANDARD FORM
- Give the coordinates of the vertex
- Give the coordinates of the focus
- Give the equation of the directrix

1.  $3x^2 + 24y = 0$

2.  $y = -16x^2$

3.  $y^2 = -12x$

4.  $x = -8y^2$

5. Find the equation of the parabola with vertex  $(0,0)$  and directrix  $x = -\frac{6}{11}$

6. Find the equation of the parabola with vertex  $(0,0)$  and focus  $(0,-6)$