**Conic Problems**

1. Find the standard equation of the parabola with vertex at the origin and focus (2,0).
2. Find the standard form of the equation of the parabola with vertex (2,1) and focus (2,4).
3. Find the standard equation of the parabola with vertex at the origin and focus (-3/2,0).
4. Find the standard equation of the parabola with vertex at the origin and the directrix at $x=-1$.
5. Find the standard equation of the parabola with vertex at the origin and the directrix at $y=-2$.
6. Find the vertex, focus and directrix of the following parabolas:

|  |  |
| --- | --- |
| $$\left(x-1\right)^{2}=-8(y+2)$$ | $$y^{2}=3x$$ |