

Hwk Derive parabola eqns given the focus & directrix Date _____ Period _____

Use the information provided to write the STANDARD FORM equation of the parabola.

1) Focus: $\left(-3, -\frac{25}{8}\right)$, Directrix: $y = -\frac{23}{8}$

Use the information provided to write the INTERCEPT FORM equation of the parabola.

2) Focus: $\left(-\frac{15}{4}, -5\right)$, Directrix: $x = -\frac{17}{4}$

Use the information provided to write the VERTEX FORM equation of the parabola.

3) Focus: $\left(1, \frac{25}{12}\right)$, Directrix: $y = \frac{23}{12}$

Use the information provided to write the GENERAL CONIC form equation of each parabola.

4) Vertex: $(7, 0)$, Directrix: $y = -\frac{1}{4}$