

Warm-up 12: Name the Conic.

1. $25x^2 + 150x = 108y + 351 - 9y^2$ → $25x^2 + 150x + 9y^2 - 108y - 351 = 0$ Ellipse

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

3. $12x^2 = 4y^2 - 180x - 40y + 85$ → $12x^2 - 4y^2 + 180x + 40y - 85 = 0$ Hyperbola

4. $y = -2x^2 + 12x - 17$ Parabola

5. $\frac{(y+6)^2}{36} - \frac{(x-1)^2}{81} = 1$ Hyperbola

6. $x^2 + y^2 + 32x - 18y + 328 = 0$ Circle