

## Warm-up 12: Name the Conic.

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

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

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

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

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