

Name _____

PreCalculus

Conic Sections Quiz Review

Part I – Identify and sketch each conic section. Include all of the following that apply: TP, Center, Radius, X/Y Stretches, Narrow/Wide, Opens Up/Down, Breaks at x/y.

1) $Y - 2 = -2/3 (x-1)^2$

2) $\frac{x^2}{16} + \frac{y^2}{9} = 1$

3) $(x+1)^2 + (y-3)^2 = 49$

4) $y - 3 = 5(x-4)^2$

5) $\frac{(y-2)^2}{16} - \frac{(x-1)^2}{25} = 1$

6) $9(x+3)^2 + 4(y-2)^2 = 36$

7) $y = x^2 + 2x + 3$ (Complete the Square)

8) $x^2 + y^2 - 6x + 10y - 2 = 0$ (Complete the Square)

Part II – Given the information below, write a correct equation for each conic section.

9) Parabola, Center (-1,5), Opens up, skinny

10) Ellipse, Center (-4,1), x-stretch 2, y-stretch 6

11) Circle, Center (5,-3), radius = 5

12) Hyperbola, Center (2, -5), x-stretch 4, y-stretch 3