

HW 6 Pg. 764 #2-12 even, 18-20, 24, 30

$$2. \frac{(x-8)^2}{5^2} - \frac{y^2}{5^2} = 1$$

Hyperbola

$$4. (x-2)^2 + (y-6)^2 = 13^2$$

circle

$$6. -4y^2 + 15x + 12y - 8 = 0$$

parabola

$$8. 6x^2 = 14x + 12y^2 - 16y + 20$$

hyperbola

$$10. x^2 + 14x - 12y + 97 = 0$$

$$y - 4 = \frac{1}{12}(x + 7)^2$$

parabola

$$12. 16x^2 + 36y^2 + 160x - 432y + 1120 = 0$$

$$\frac{(x+5)^2}{36} + \frac{(y-6)^2}{16} = 1$$

ellipse

$$18. 12x^2 - 18y^2 - 18x - 12y + 12 = 0$$

hyperbola

$$29. 7x^2 + 28x - 29y - 16 = 0$$

parabola

$$20. -12x^2 - 3y^2 + 7x + 9y - 5 = 0$$

ellipse

$$24. 9x^2 + 36y^2 - 72x - 180 = 0$$

$$\frac{(x-4)^2}{36} + \frac{y^2}{9} = 1$$

$$30. y^2 + 6x + 12y - 6 = 0$$

$$x - 7 = -\frac{1}{6}(y + 6)^2$$