**Honors Precalculus Name**

**Circles Assignment**

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| 1. Write an equation in standard form for the circle that is graphed below. | 2. Rewrite the equation of circle in standard form (x – h)2 + (y – k)2 = r2. 3x2 + 3y2 – 24y – 27 = 0 |
| 3. Rewrite the equation of circle in standard form. 5x2 + 5y2 + 20y – 10x = 20 | 4. Sketch a graph and solve the system algebraically.  Give exact answers. x2 + y2 = 4 x – 2y = 25x5plan |
| 5. Sketch a graph and solve the system algebraically. Give exact answers. x2 + y2 = 9 y = x2 – 25x5plan | 6. Sketch a graph and solve the system algebraically. Give exact answers. y = 1 + 2x – x2 y = 1 – x5x5plan |
| 7. Write an equation of the parabola with focus (-5, 3) 5x5plan and vertex (-5, 6). Graph the parabola. | 8. Write an equation of the parabola with focus (2, -3)  and directrix x = 5. Graph the parabola.5x5plan |