**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 = 2  5x5plan |
| 5. Sketch a graph and solve the system algebraically.  Give exact answers.  x2 + y2 = 9  y = x2 – 2  5x5plan | 6. Sketch a graph and solve the system algebraically.  Give exact answers.  y = 1 + 2x – x2  y = 1 – x  5x5plan |
| 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 |