MAC1140 SEC29 HW 10-17-2007 9.4 10.1

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Due: 10-19-2007

Full Name: Sec#: Extra Credit Attempted?

1.

[9.4.2cPT]Select the asymptotes of the hyperbola given by $\frac{y^2}{16} - \frac{x^2}{36} = 1$.

- ○ $y = \pm\frac{3}{8}x$
- ○ $y = \pm\frac{3}{2}x$
- ○ $y = \pm\frac{8}{3}x$
- ○ $y = \pm\frac{2}{3}x$

2.

[9.4.3aPT]Select the vertices of the hyperbola given by $\frac{(y-4)^2}{25} - \frac{(x+3)^2}{39} = 1$.

- ○ $(-3, 4 \pm 8)$
- ○ $(-3 \pm 5, 4)$
- ○ $(-3, 4 \pm 5)$
- ○ $(-3 \pm 8, 4)$

3.

[9.4.3bPT]Select the foci of the hyperbola given by $\frac{(x+1)^2}{16} - \frac{(y-5)^2}{33} = 1$.

- ○ $(-1 \pm 4, 5)$
- ○ $(-1, 5 \pm 4)$
- ○ $(-1, 5 \pm 7)$
- ○ $(-1 \pm 7, 5)$

[10.1.1PT]Select the type of solution for the following system

4. $\begin{cases} 2x + 4y = 4 \\ -3x - 6y = -1 \end{cases}$

- ○ No solution
- ○ None of these
- ○ A unique solution
- ○ Infinitely many solutions
- ○ Exactly two solutions

[10.1.1PT]Select the type of solution for the following system

5. $\begin{cases} -2x - 9y = -2 \\ -5x + 4y = 1 \end{cases}$

- ○ None of these
- ○ Infinitely many solutions
- ○ Exactly two solutions
- ○ A unique solution
- ○ No solution

6.

[10.1.1PT]Select the type of solution for the following system

$\begin{cases} 3x + 6y = 6 \\ -2x - 4y = -4 \end{cases}$

- ○ Exactly two solutions
- ○ A unique solution
- ○ None of these
- ○ No solution
- ○ Infinitely many solutions