

Name _____

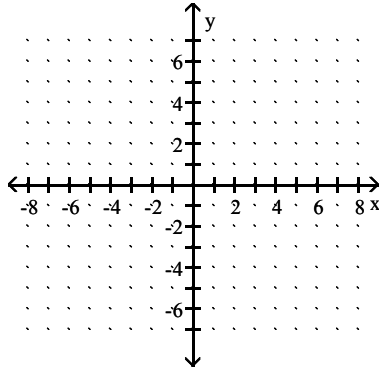
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Graph the solution set of the system of inequalities or indicate that the system has no solution.

1) $x^2 + y^2 \leq 81$

$x^2 + y^2 \geq 9$

1) _____



Solve the system by the substitution method.

2) $xy = 1$

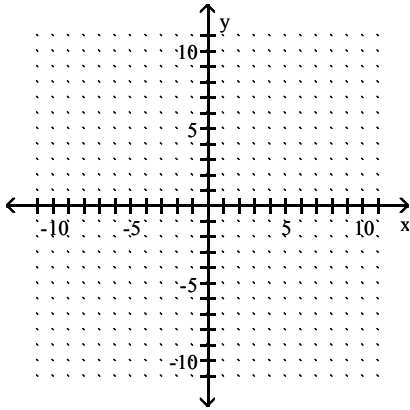
$-12x - y = -7$

2) _____

Graph the solution set of the system of inequalities or indicate that the system has no solution.

3) $x^2 + y^2 \leq 36$

$y - x^2 > 0$



3) _____

Solve the system by the substitution method.

4) $x + y = 12$

$y = x^2 - 12x + 36$

4) _____

Write the partial fraction decomposition of the rational expression.

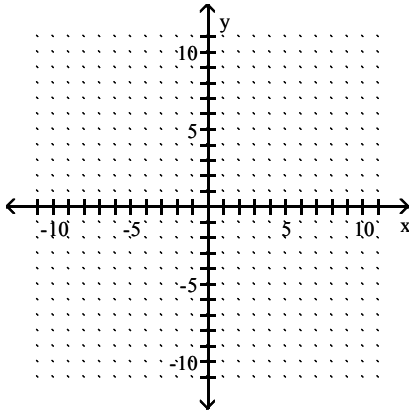
5) $\frac{3x + 7}{(x - 8)^2}$

5) _____

Graph the solution set of the system of inequalities or indicate that the system has no solution.

6) $x^2 + y^2 \leq 81$
 $-3x + 7y \leq -21$

6) _____



Solve the system by the addition method.

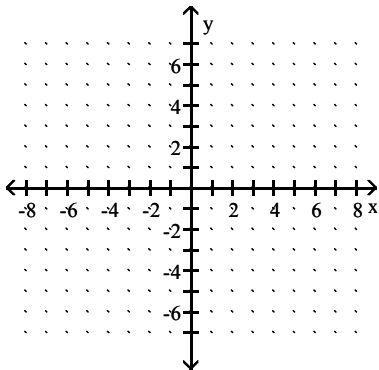
7) $x^2 + y^2 - 8x + 2y - 8 = 0$
 $x^2 - y^2 - 8x - 2y - 10 = 0$

7) _____

Graph the solution set of the system of inequalities or indicate that the system has no solution.

8) $3x + y > 3$
 $3x + y < 1$

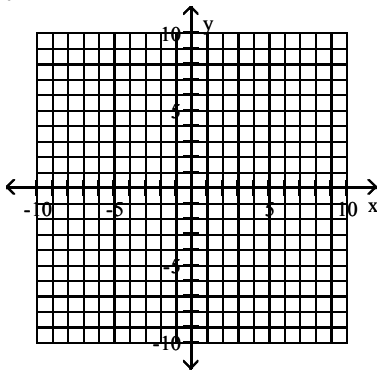
8) _____



Graph the inequality.

9) $y > x^2 + 1$

9) _____



Write the partial fraction decomposition of the rational expression.

10) $\frac{15x^2 - x - 20}{x(x + 1)(x - 1)}$

10) _____

Solve the system by the addition method.

11) $x^2 + y^2 = 16$

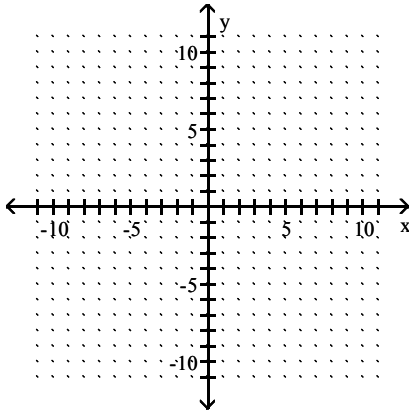
$16x^2 + 9y^2 = 144$

11) _____

Graph the solution set of the system of inequalities or indicate that the system has no solution.

$$\begin{aligned} 12) \quad & y > x^2 \\ & 8x + 2y \leq 16 \end{aligned}$$

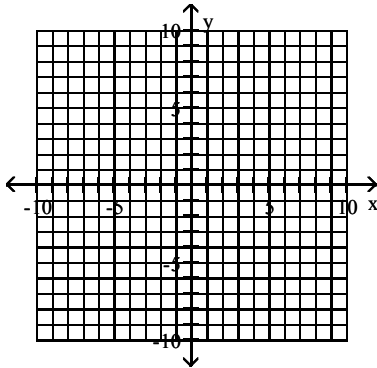
12) _____



Graph the inequality.

$$13) \quad x^2 + y^2 \leq 1$$

13) _____



Solve the system by the substitution method.

$$\begin{aligned} 14) \quad & y = x^2 - 13 \\ & x^2 + y^2 = 25 \end{aligned}$$

14) _____

Solve the system by the addition method.

$$\begin{aligned} 15) \quad x^2 + y^2 &= 85 \\ x^2 - y^2 &= -13 \end{aligned}$$

15) _____

Write the partial fraction decomposition of the rational expression.

$$16) \frac{9x^2 - x - 16}{x^3 - x}$$

16) _____

Solve by the method of your choice.

$$\begin{aligned} 17) \quad x^3 + y &= 0 \\ 7x^2 - y &= 0 \end{aligned}$$

17) _____

Write the partial fraction decomposition of the rational expression.

$$18) \frac{x - 10}{(x - 2)(x - 4)}$$

18) _____

Solve by the method of your choice.

$$\begin{aligned} 19) \quad x^2 + y^2 &= 100 \\ (x - 3)^2 + y^2 &= 73 \end{aligned}$$

19) _____

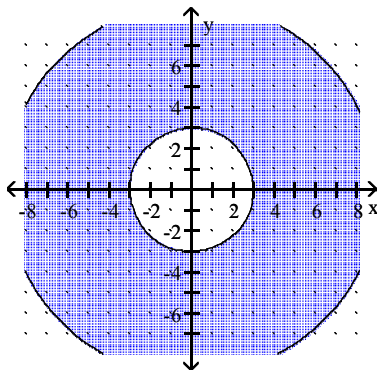
Write the partial fraction decomposition of the rational expression.

$$20) \frac{x + 5}{x^3 - 2x^2 + x}$$

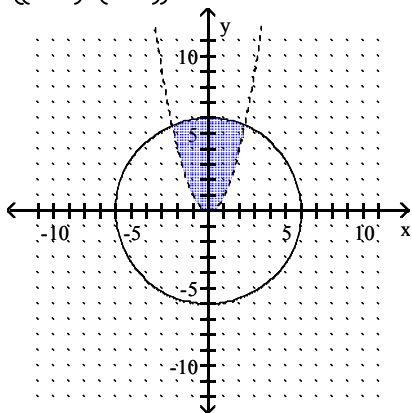
20) _____

Answer Key
 Testname: CH 7 REVIEW

1)



2) $\left\{ \left(\frac{1}{3}, 3 \right), \left(\frac{1}{4}, 4 \right) \right\}$

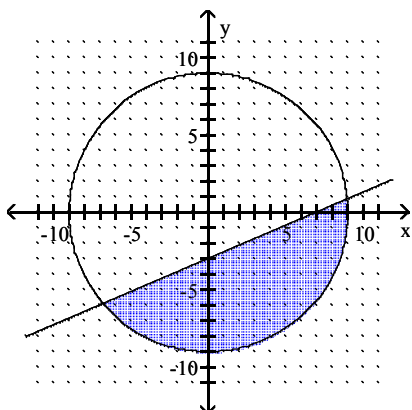


3)

4) $\{(3, 9), (8, 4)\}$

5) $\frac{3}{x-8} + \frac{31}{(x-8)^2}$

6)

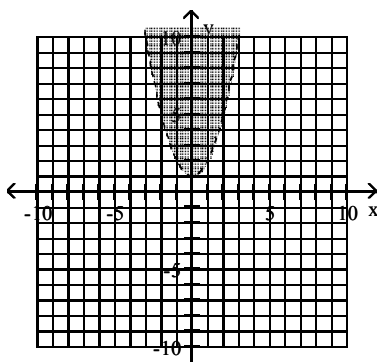


7) $\{(9, -1), (-1, -1)\}$

Answer Key
Testname: CH 7 REVIEW

8) no solution

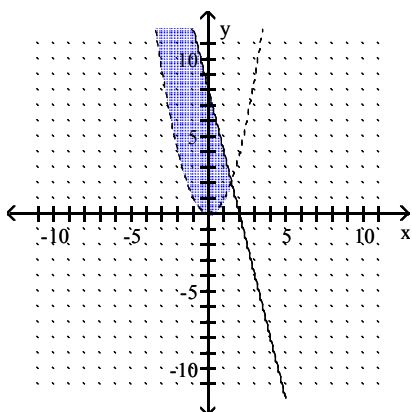
9)



10) $\frac{20}{x} + \frac{-2}{x+1} + \frac{-3}{x-1}$

11) $\{(0, 4), (0, -4)\}$

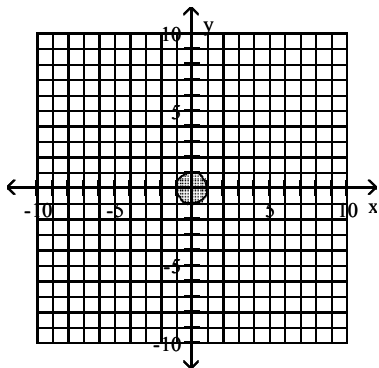
12)



Answer Key

Testname: CH 7 REVIEW

13)



14) $\{(-4, 3), (-3, -4), (3, -4), (4, 3)\}$

15) $\{(6, 7), (-6, 7), (6, -7), (-6, -7)\}$

16) $\frac{16}{x} + \frac{-3}{x+1} + \frac{-4}{x-1}$

17) $\{(0, 0), (-7, 343)\}$

18) $\frac{4}{x-2} + \frac{-3}{x-4}$

19) $\{(6, 8), (6, -8)\}$

20) $\frac{5}{x} + \frac{-5}{x-1} + \frac{6}{(x-1)^2}$