

3.5 Solving Non-Linear Systems DAY TWO CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Solving Systems by graphing	7, 8	9, 10	3 - 6
Solving Systems by substitution	3, 4	5, 6	
Solving Systems by elimination		3, 4	5, 6
Checking solutions		1, 2	

State if the point given is a solution to the system of equations.

1.
$$\begin{aligned} x^2 + y^2 - 7x + 3y - 28 &= 0 \\ -2x + y - 4 &= 0 \end{aligned} \quad (3, -5)$$

2.
$$\begin{aligned} -2x^2 + 2y^2 - 2x + 8y + 5 &= 0 \\ -x^2 + 26y^2 - 2x + 104y + 77 &= 0 \end{aligned} \quad (-1, -3)$$

Solve each system of equations. You choose which method between graphing, substitution, or elimination. Show all your work to earn full credit.

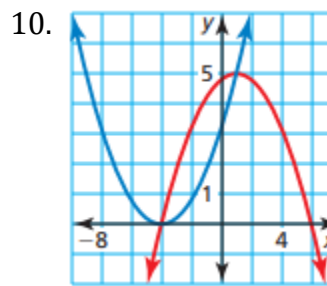
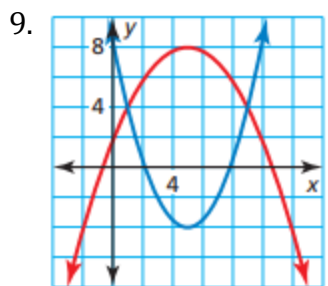
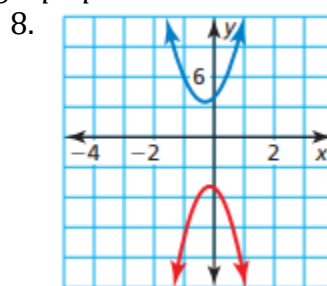
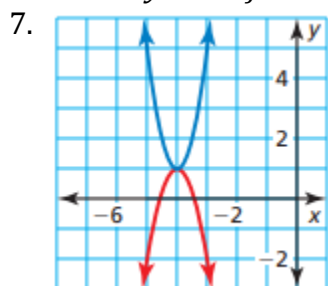
3.
$$\begin{aligned} 3x^2 + 2y^2 - 54y - 143 &= 0 \\ x - 3y - 3 &= 0 \end{aligned}$$

4.
$$\begin{aligned} x^2 + 2y^2 - 11x - 3y + 31 &= 0 \\ -x + y + 4 &= 0 \end{aligned}$$

5. $x^2 + y^2 + x + 3y + 2 = 0$
 $x - y = 0$

6. $-x^2 - 3x + y = 0$
 $-12x^2 - 3x + y = 0$

Solve the system of nonlinear equations using the graph provided.



CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the

