

Use elimination to find the x-coordinate for the solution to the following system.

$$4x - 3y = 20$$

$$2x + 6y = -5$$

	Answer Choice	Feedback
A	3.5	Correct. You correctly multiplied and added to eliminate y and solve for x.
B	$\frac{35}{6}$	Incorrect because your terms did not have opposite signs when you added the equations.
C	8.75	Incorrect because your terms did not have opposite signs when you added the equations.
D	$\frac{3}{2}$	Incorrect because you did not multiply <i>each term</i> in the original to get an equivalent equation.

Which of the following systems does *not* have (-2, 5) as a solution?

	Answer Choice	Feedback
A	$\begin{cases} 2x + 3y = 11 \\ 3x + 2y = 4 \end{cases}$	Incorrect. The point (-2, 5) is the solution for this system.
B	$\begin{cases} y = 4x + 3 \\ 2x - y = -9 \end{cases}$	Incorrect. The point (-2, 5) is the solution for this system.
C	$\begin{cases} y = 3x^2 - 7 \\ x + 2y = 8 \end{cases}$	Incorrect. The point (-2, 5) is one of the solutions for this system. The other is $\left(\frac{11}{6}, \frac{37}{12}\right)$.
D	$\begin{cases} 2x^2 + y = 12 \\ 4x + 2y = 2 \end{cases}$	Correct. The point (-2, 5) only works in one of these equations so it <i>cannot</i> be a solution to the system.

During the no-calculator portion of a math contest, LaKeisha's team was asked to solve the following system

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

If LaKeisha's team uses elimination, which equation could be used to accurately solve the system?

	Answer Choice	Feedback
A	$2x^2 - 5x - 7 = 0$	Correct. After multiplying the first equation by 2 and eliminating the y-terms, the resulting equation is set equal to zero.
B	$2x^2 - 5x + 7 = 0$	Incorrect. An error was made setting the equation equal to zero.
C	$2x^2 - 11x - 7 = 0$	Incorrect. An error was made when adding the two equations.
D	$2x^2 - 5x - 5 = 0$	Incorrect because you did not multiply <i>each term</i> in the quadratic equation by 2 to get an equivalent equation.

Mr. Nguyen put the following system on the Algebra 2 test.

$$\begin{cases} x^2 + 8x - y + 9 = 0 \\ x + y - 1 = 0 \end{cases}$$

What is the correct solution?

	Answer Choice	Feedback
A	(1, 2) and (-8, 9)	Incorrect because only one of these points is a solution.
B	(-1, 2)	Incorrect because this is only one of two points of intersection.
C	(1, 2) and (8, 9)	Incorrect because you did not set your factors equal to zero and solve for x.
D	(-1, 2) and (-8, 9)	Correct. The line intersects the parabola in these two points.