Algebra II - Review Chapter 3
Copy these Test Topics - TEST BLOCK DAY
When you finish, get a whiteboard, marker and eraser.

Solving Systems by:
- Graphing
- Substitution
- Elimination

Graphing Linear and Absolute Value Inequalities
Solving Word Problems using Systems with 2 variables
Calculator Part 2 -Finding the intersection using 2nd Trace (Calc)
Linear Programming

| Lesson objectives | Teachers' notes |

Nov 4-10:26 AM

Calculator is OK

Tickets for your school's play are $3 for students and $5 for non-students. On opening night 937 tickets are sold and $3943 is collected. How many tickets were sold to students? to non-students?

Pull tab to reveal answer

371 students
566 non-students

Jul 29-5:04 PM

Solve by graphing:

$2x + 3y > 12$

$y \leq -|4(x + 2)| -$

Pull tab to reveal answer

Jul 29-4:58 PM

Set up a system to solve the word problem.

On November 4th, against Conifer HS, Rob Beldock scored a total of 15 points, making a total of 9 shots. He scored all his points on 2-point and 3-point shots. How many of each type of shot did he make?
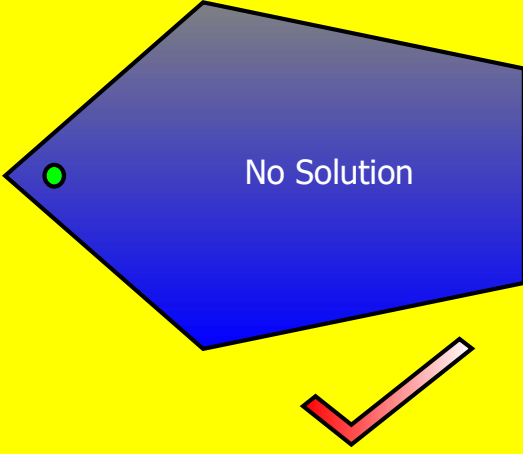
Pull tab to reveal answer

7 3-point shots
2 2-point shots

Jul 29-5:06 PM

Solve using substitution.

x - 5y = 12
-x + 5y = -4
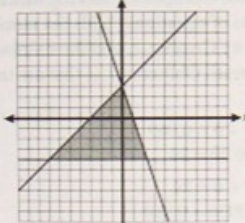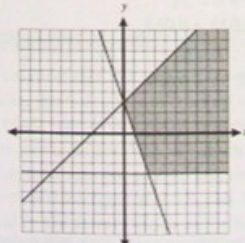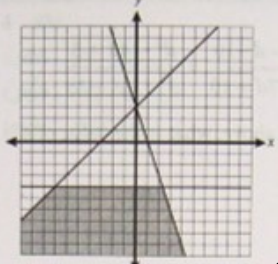
Pull tab to reveal answer
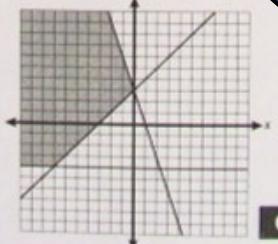
No Solution

Jul 29-5:09 PM

$-2y \leq 8$

$y - 3 \leq x$

$-\frac{1}{3}y + 1 \geq x$

Which of the following graphs shows the solution to the system of inequalities above?
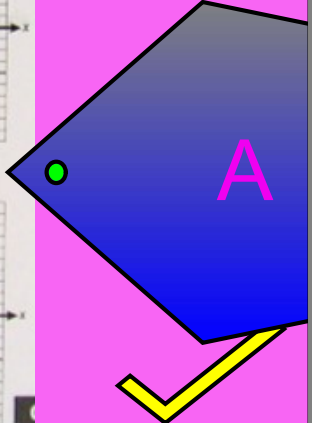
A)

B)

C)

D)

Pull tab to reveal answer

A

Jul 29-5:04 PM

Let's review linear programming - WB pg 27

$x + 1.5y \leq 6$
$x + (3)y \leq 6)\frac{2}{5}$
$x = 6 \quad y = 4$

1) Mrs. Doubtfire is baking cakes and pies for a bake sale. Her cake recipe uses 2 eggs and 1 cup of milk, and her pie recipe uses 1 egg and 1 1/2 cups of milk. Mrs. Doubtfire wants to bake as many items (cakes and pies) as possible using the 8 eggs and 6 cups of milk that she has on hand. How many cakes and pies should Mrs. Doubtfire make if she wants to make a profit of $3 for each cake and $3 for each pie? What is her profit?

		Cakes	Pies	Total / Limits	Inequality / constraints
# of (what is being produced?)	Baked Goods	x	y		
limitation #1	Eggs	2	1	8	$2x + y \leq 8$
limitation #2	Milk	1	1.5	6	$x + 1.5y \leq 6$
objective function	$	$3	$3		$3x + 3y = P$

(4,0)
(0,8)
(6,0)
(0,4)

$(0,4) \rightarrow 3(0) + 3(4) = 12$
$(3,2) \rightarrow 3(3) + 3(2) = 15$
$(4,0) \rightarrow 3(4) + 3(0) = 12$

Max profit
$15 w/
3 cakes & 2 pies

Sep 20-10:54 AM

GO COUGARS!

HW - REVIEW Ch. 3

pg. 138 #1-10 (skip 7) & pg. 145 #1-3 and WB pg. 28 (yes, you get a decimal!)

OPTIONAL Review Quizizz and extra practice linked in the calendar

Sep 20-10:54 AM

More practice if necessary

Sep 16-4:16 PM

FOR EXTRA PRACTICE
LINEAR PROGRAMMING

Sep 16-4:19 PM

Please get your homework and get started on this linear programming

The profit on each set of cassettes that is manufactured by MusicMan, Inc. is $8. the profit on a single cassette is $2. Machines A and B are used to produce both types of cassettes. Each set takes nine minutes on Machine A and three minutes on Machine B. Each single takes one minute on Machine A and one minute on Machine B. If Machine A can run for no more than 54 minutes and Machine B can run for no more than 42 minutes, determine the combination of cassettes that can be manufactured during the time period that most effectively generates profit within the given constraints.

|			total/limits	Inequality/constraints
# of (what is being produced)			◉	◉
limitation #1				
limitation #2				
objective function				
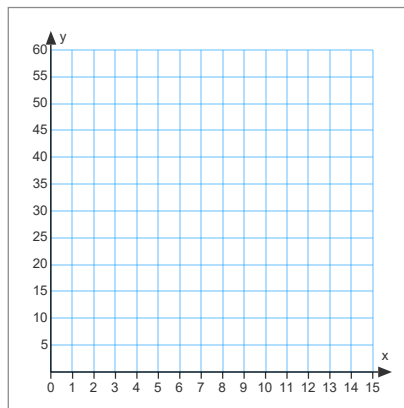
Sep 27-10:09 AM

Please get your homework and get started on your Do Now

The profit on each set of cassettes that is manufactured by MusicMan, Inc. is $8. the profit on a single cassette is $2. Machines A and B are used to produce both types of cassettes. Each set takes nine minutes on Machine A and three minutes on Machine B. Each single takes one minute on Machine A and one minute on Machine B. If Machine A can run for for no more than 54 minutes and Machine B can run for no more than 42 minutes, determine the combination of cassettes that can be manufactured during the time period that most effectively generates profit within the given constraints.

	Set of Cassettes	Single Cassette	total/limits	Inequality/constraints
# of (what is being produced)	X	Y	◉	◉
Machine A	9	1	54	$9x + y \le 54$
Machine B	3	1	42	$3x + y \le 42$
objective function	$8	$2	$P = 8x + 2y$	
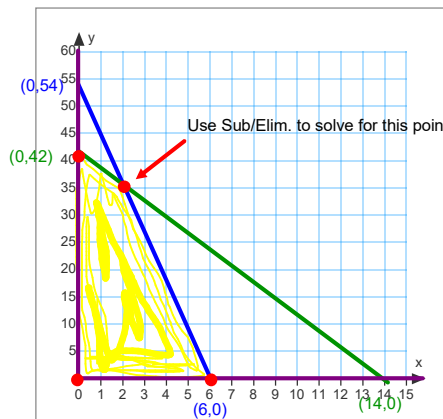
x	y	P=8x+2y	
0	0	0	
0	42	84	
6	0	48	
2	36	88	MAX

Sep 27-10:09 AM

Median Price of Homes (in thousands of $) for 1995-2000

Years after 1990	Northeast	South
5	126.7	97.7
6	127.8	103.4
7	131.8	109.6
8	135.9	116.2
9	139.0	120.3
10	139.4	128.3

Pull tab to reveal answer
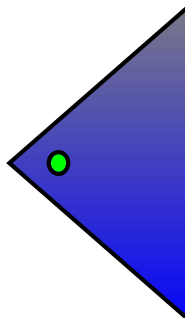
In what year will they be the same?
What will the median price of the homes be?

Sep 24-8:22 AM