#### **Homework Answers**

### I will also answer questions on the word Problem Homework!

44. 
$$x+2y+z=14$$

$$-2(y-z=1) -2y+2z=-2$$

$$-1(x+3z=-6) = 6$$

$$3x+y-2z=22$$

$$x+5y+z=4$$

$$x+3z=0$$

$$-15x-5y+10z=-110$$

$$-14x+11z=-106$$

$$(14)+14x+42z=0$$

$$53z=-106$$

$$z=-2$$

# Algebra II - Review Chapter 3

### Solving Systems by:

- Graphing
- Substitution
- Elimination

N.S.

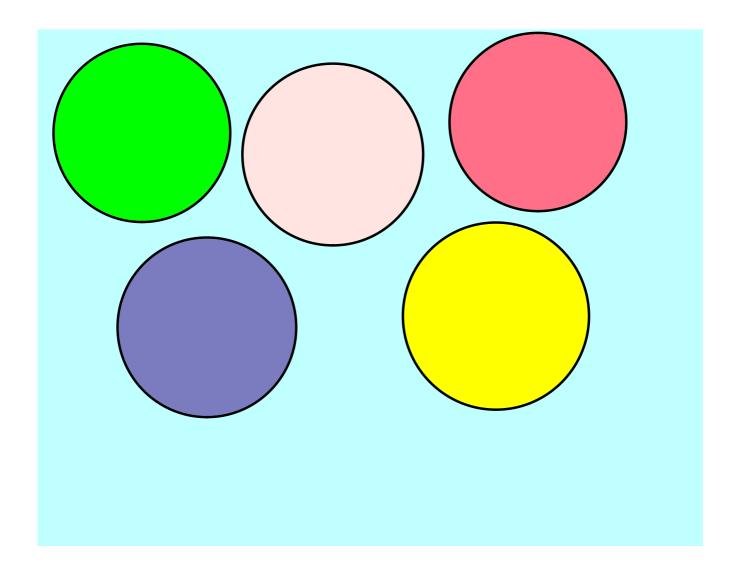
Graphing Linear and Absolute Value Inequalities
 Solving Systems using 3 Variables

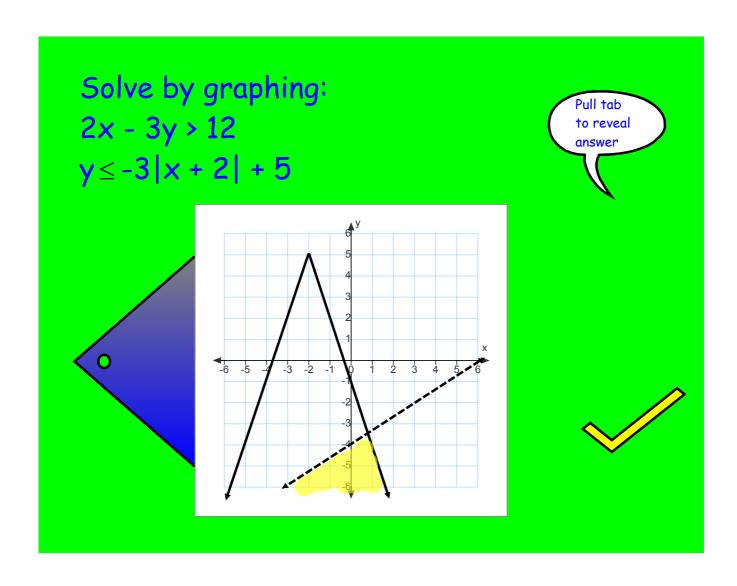
Solving Word Problems using Systems with 2 or 3 variables Linear Programming

Calculator Problem - using Stat --> Calc --> Lin Reg then finding the intersection using 2nd Trace (Calc)

Lesson objectives

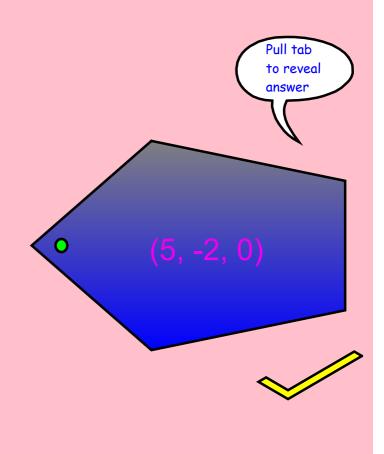
Teachers' notes





## Solve the System:

$$x - y + 2z = 7$$
  
 $2x + y + z = 8$   
 $x - z = 5$ 



Solve the word problem by setting up a system, and solve by using substitution or elimination.



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?

$$3x + 5y = 3943$$
 $-3(x + y = 937)$ 
 $-3x - 3y = -2811$ 
 $3x + 5y = 3943$ 
 $x = 4 \text{ student}$ 
 $3x + 5y = 3943$ 
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 $3x + 5y =$ 

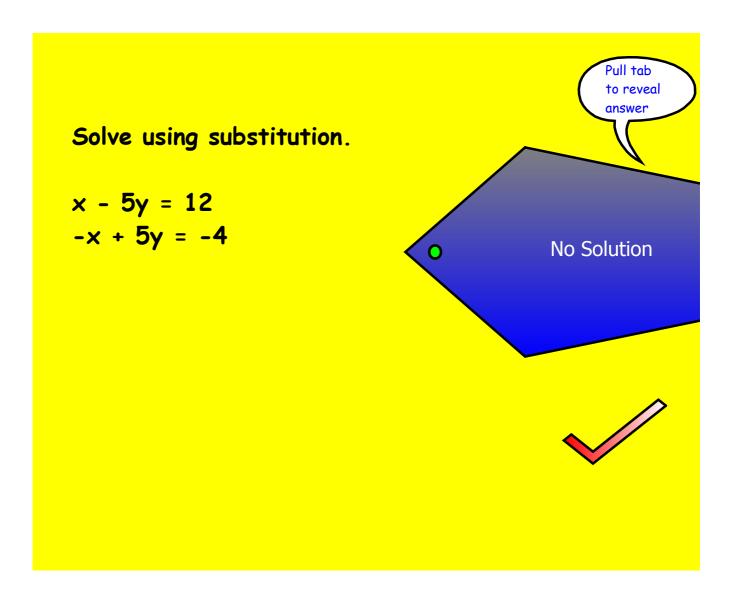
Median Price of Homes (in thousand for 1995-2000

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

y = 2.89x + 111.75 y = 6x + 67.51 Year 2010 Med Price \$152,860.48

In what year will they be the same? What will the median price of the homes be?

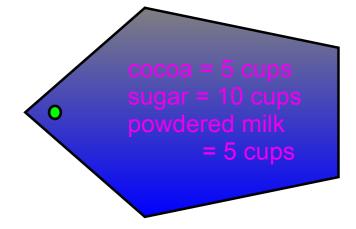




Pull tab to reveal answer

Solve the word problem by setting up a system, and then solving.

A 20 cup bag of cake mix contains cocoa, sugar and powdered milk. The cocoa costs \$2 per cup, sugar costs \$1.50 per cup and powdered milk costs \$2.50 per cup. To manufacture the mix, a company needs to add twice as much sugar than cocoa. The cost of the bag of cake mix is \$37.50 How much of each ingredient is needed to make the mix?



HW - REVIEW Ch. 3 P164 #1, 2, 3, 5, 6, 8-10, 28, 29 Workbook P 21 p 841 38, 41