

## DO NOW

Name:

Date:

Using Modeling to Make Choices:																																																																
Option 1: Download songs from <i>Johnny's Songs.com</i> for \$12 plus 0.25 per song:	Option 2: Download songs from <i>Songs -R-Us.com</i> for \$1 per song:																																																															
<table border="1"> <thead> <tr> <th></th> <th>Process</th> <th></th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table>		Process																													<table border="1"> <thead> <tr> <th></th> <th>Process</th> <th></th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> </tbody> </table>		Process																															
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Equation:	Equation:																																																															
<b>Graph: Label the axes and plot the points.</b>	<b>Communication</b>																																																															
	<p>How much does it cost to download 10 songs?</p> <p>Which website would you choose and why? Be specific.</p> <p>How many songs would you download for the cost to be the same?</p> <p>If you had \$40 to spend, how many songs could you download from Johnny's Songs.com?</p>																																																															

***HW: finish LINKS sheets***

***Written Exercises p. 132 # 1, 3, 17***

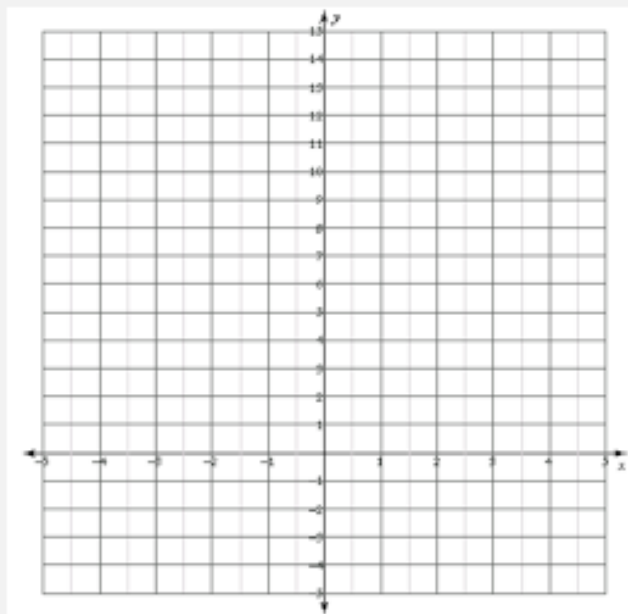
511 Math  
Systems LINKSName: \_\_\_\_\_  
Date: \_\_\_\_\_**Algebraic Model**

$$y = 4$$

$$y = 2x - 2$$

**Numerical Model (Table)**

$x$	$y = 4$	$x$	$y = 2x - 2$
-3		-3	
-1		-1	
1		1	
3		3	
5		5	

**Graphical Model****Solution**

What is the solution to the system of equations?

Verify this solution.

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Systems LINKS

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Algebraic Model**

$$y = -3x - 1$$

$$y = x + 7$$

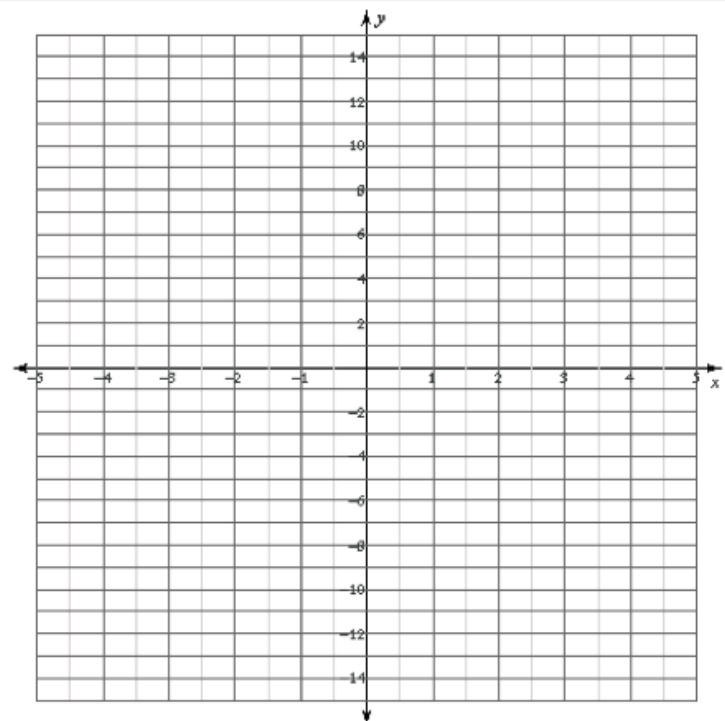
**Numerical Model (Table)**

$x$	$y = -3x - 1$	$x$	$y = x + 7$
-4		-4	
-2		-2	
0		0	
2		2	
4		4	

**Solution**

What is the solution to the system of equations?

Verify this solution.

**Graphical Model**

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Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### Algebraic Model

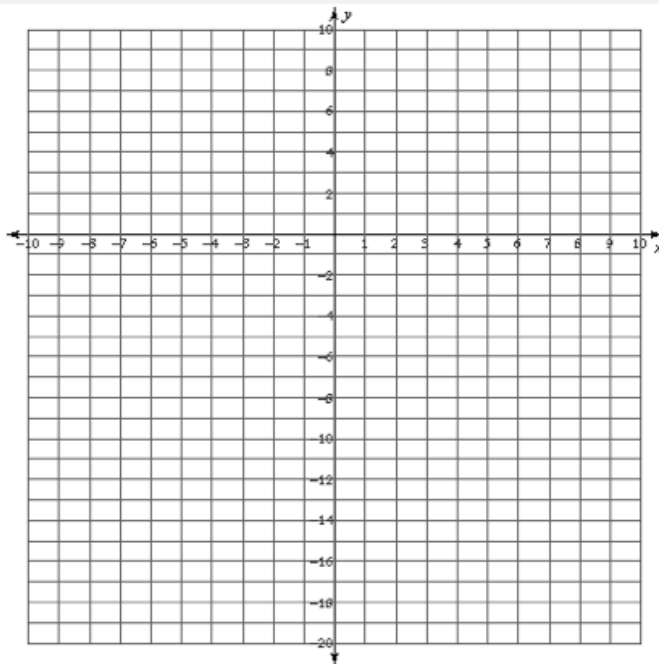
$$3x + y = 11$$

$$2x + y = 5$$

### Numerical Model (Table)

$x$	$y$	$x$	$y$
2		2	
4		4	
6		6	
8		8	
10		10	

### Graphical Model



### Solution

What is the solution to the system of equations?

Verify this solution.

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Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### Algebraic Model

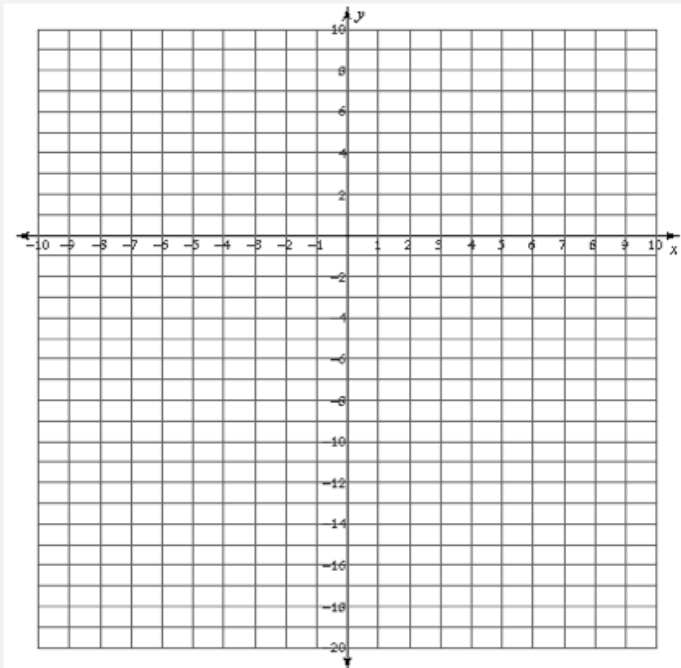
$$x - 2y = 16$$

$$4x + 2y = 24$$

### Numerical Model (Table)

$x$	$y$	$x$	$y$
2		2	
4		4	
6		6	
8		8	
10		10	

### Graphical Model



### Solution

What is the solution to the system of equations?

Verify this solution.

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Systems LINKS

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

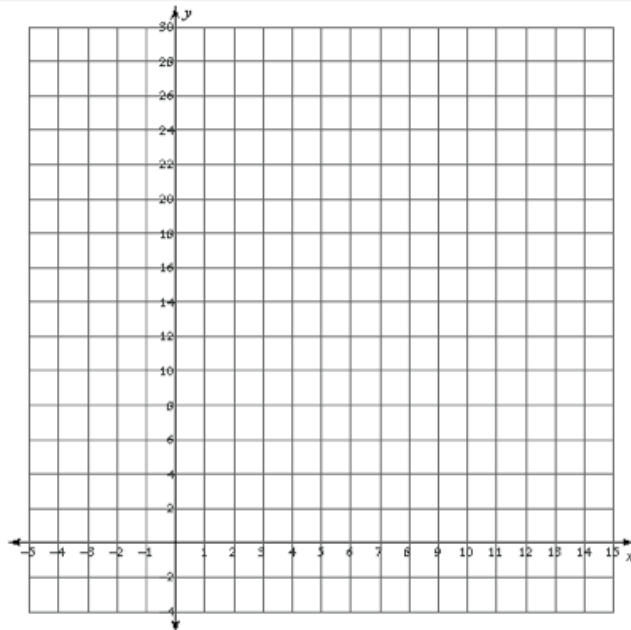
### Algebraic Model

$$3x + 5 = 6x - 4$$

### Numerical Model (Table)

$x$	$y = 3x + 5$	$x$	$y = 6x - 4$
1		1	
2		2	
3		3	
4		4	
5		5	

### Graphical Model



### Solution

What is the solution to the system of equations?

Verify this solution.

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Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### Verbal Model

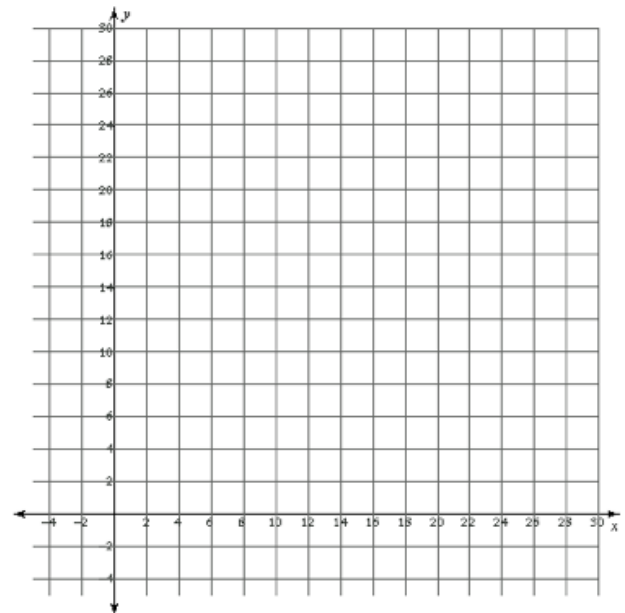
You ride an express bus from the center of town to your street. You have two payments options. Option A is to buy a monthly pass and pay \$1 per ride. Option B is to pay \$2.50 per ride. A monthly pass costs \$30. After how many rides will the total costs of the two options be the same?

### Algebraic Model

### Numerical Model (Table)

$x$	Option A	$x$	Option B

### Graphical Model



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Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### Verbal Model

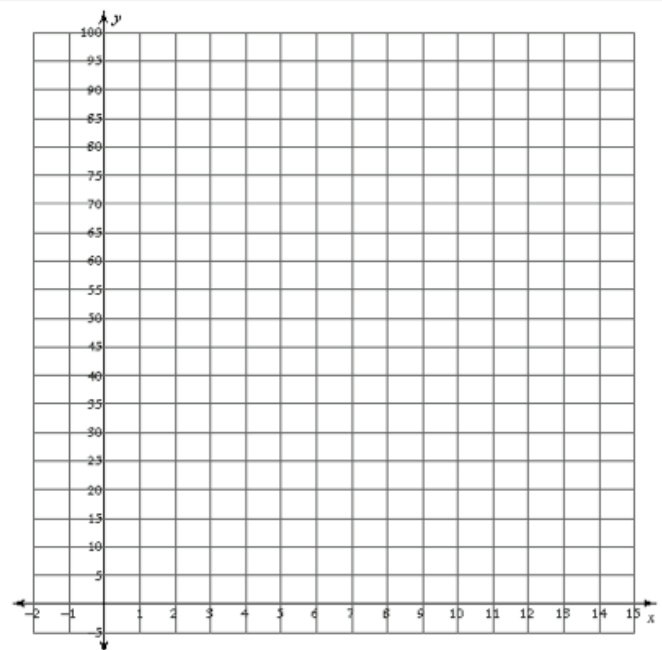
Tickets for the freshman semi-formal cost \$20 for a single ticket and \$35 for a couple. Ticket sales totaled \$2280, and 128 people attended. How many tickets of each type were sold?

### Algebraic Model

### Numerical Model (Table)

$x$	Option A	$x$	Option B

### Graphical Model





## PARTNER EXIT TICKETS

## Exit Ticket

Block: \_\_\_\_\_ Name: \_\_\_\_\_

1) Solve by Substitution

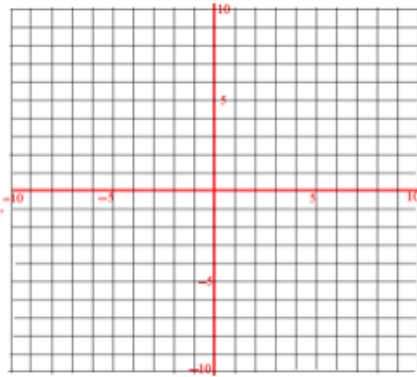
$$y = -x + 7$$

$$x + y = 7$$

2) Solve by graphing

$$y = -2x - 3$$

$$-4x + 8y = 16$$



3) Solve by Substitution

$$y = (2/5)x$$

$$3x + 5y = 25$$

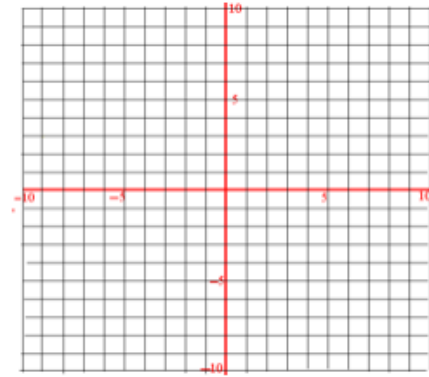
## Exit Ticket

Block: \_\_\_\_\_ Name: \_\_\_\_\_

1) Solve by graphing

$$y = -x + 7$$

$$x + y = 7$$



2) Solve by Substitution

$$y = -2x - 3$$

$$-4x + 8y = 16$$

3) Solve by Substitution

$$y = (3/5)x - 1$$

$$2x + 5y = 20$$