

keep scrolling to  
get a sneak peek!

Help your Algebra students  
practice graphing linear  
functions in slope-intercept form.  
Your students will benefit from  
being given choice when it  
comes to how they want to  
practice math!

# GRAPHING SLOPE INTERCEPT FORM

## CHOICE BOARD

The collage shows several worksheets for graphing linear functions in slope-intercept form. Each worksheet includes a coordinate plane and a line graphed on it. The equations and their corresponding slope (m) and y-intercept (b) are listed next to the graphs.

- Worksheet 1:  $y = 3x + 4$ ,  $m =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_
- Worksheet 2:  $y = x - 1$ ,  $m = 1$ ,  $b = (0, -1)$
- Worksheet 3:  $y = 1/3x - 5$ ,  $m =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_
- Worksheet 4:  $y = 1/2x + 2$ ,  $m = 1/2$ ,  $b = (0, 2)$
- Worksheet 5:  $y = 3x -$ ,  $m = 3$ ,  $b = (0, 4)$
- Worksheet 6:  $y = 1/3x - 5$ ,  $m =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_

The worksheets also include a 'Date:' field and a 'Name:' field. One worksheet is titled 'ANSWER KEY' and includes the text 'Directions: Choose \_\_\_\_\_ problems from each column.' A logo for 'Math with Ms. Rivera' is visible in the bottom right corner of the collage.

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Why do you need this?



Allowing student choice in how they practice will encourage them to do the practice!



You can differentiate by the number of problems required of particular students.

# Graphing in Slope-Intercept Form Choice Board

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

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

$y = x - 1$ $m =$ _____ $b =$ _____		$y = 3x + 4$ $m =$ _____ $b =$ _____	
$y = 1/2x + 2$ $m =$ _____ $b =$ _____		$y =$ _____ $m =$ _____ $b =$ _____	
$y = -2x - 4$ $m =$ _____ $b =$ _____		$y = 1/2x + 2$ $m =$ <u><math>1/2</math></u> $b =$ <u><math>(0, 2)</math></u>	$y = 1/3x - 5$ $m =$ <u><math>1/3</math></u> $b =$ <u><math>(0, -5)</math></u>
$y = 3/4x$ $m =$ _____ $b =$ _____		$y = -2x - 4$ $m =$ <u><math>-2</math></u> $b =$ <u><math>(0, -4)</math></u>	$y = -3x + 6$ $m =$ <u><math>-3</math></u> $b =$ <u><math>(0, 6)</math></u>
		$y =$ _____ $m =$ _____ $b =$ _____	$y = -2/3x$ $m =$ _____ $b =$ _____

**ANSWER KEY**

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

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

$y = x - 1$ $m =$ <u><math>1</math></u> $b =$ <u><math>(0, -1)</math></u>		$y = 3x + 4$ $m =$ <u><math>3</math></u> $b =$ <u><math>(0, 4)</math></u>	
$y = 1/2x + 2$ $m =$ <u><math>1/2</math></u> $b =$ <u><math>(0, 2)</math></u>		$y = 1/3x - 5$ $m =$ <u><math>1/3</math></u> $b =$ <u><math>(0, -5)</math></u>	
$y = -2x - 4$ $m =$ <u><math>-2</math></u> $b =$ <u><math>(0, -4)</math></u>		$y = -3x + 6$ $m =$ <u><math>-3</math></u> $b =$ <u><math>(0, 6)</math></u>	
$y = 3/4x$ $m =$ <u><math>3/4</math></u> $b =$ <u><math>(0, 0)</math></u>		$y = -2/3x$ $m =$ <u><math>-2/3</math></u> $b =$ <u><math>(0, 0)</math></u>	

# Graphing Slope-Intercept Form Choice Board *includes:*

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

*Graphing Slope-Intercept Form*

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

$y = x - 1$ $m =$ _____ $b =$ _____	$y = 3x + 4$ $m =$ _____ $b =$ _____
$y = 1/2x + 2$ $m =$ _____ $b =$ _____	$y = 1/3x - 5$ $m =$ _____ $b =$ _____
$y = -2x - 4$ $m =$ _____ $b =$ _____	$y = -3x + 6$ $m =$ _____ $b =$ _____

- ✓ 2 printable worksheets
- ✓ a detailed answer key
- ✓ 2 columns with 4 questions in each - 16 question total
- ✓ Spot to assign how many problems students need to complete

# Graphing in Slope-Intercept Form Choice Board

standards covered:

**CCSS:** HSA-CED.A.2,  
HSF-IF.C.7, HSF-IF.C.7a

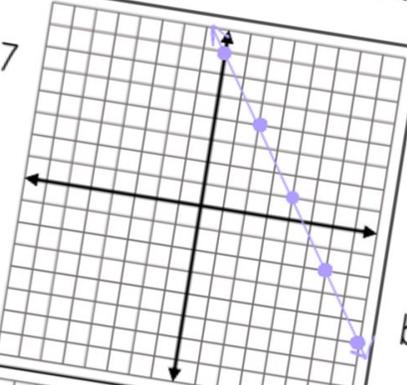
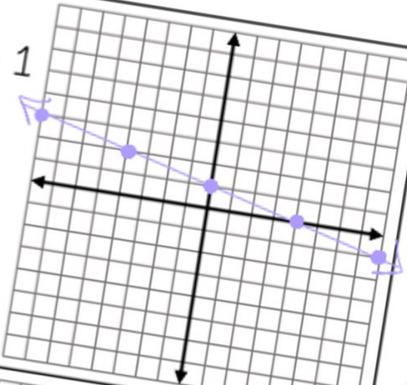
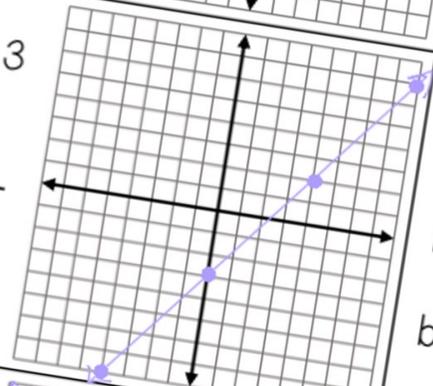
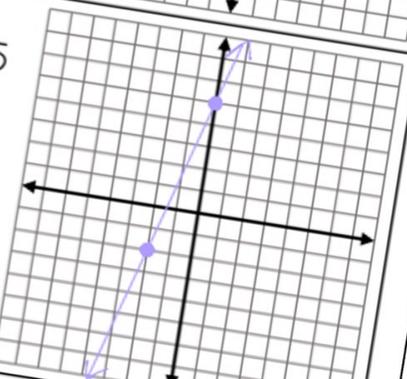
**TEKs:** A1.3.C

**VA SOLs:** EI.A.6.c

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

**ANSWER KEY**

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

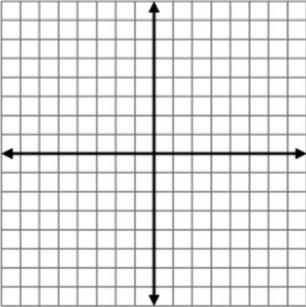
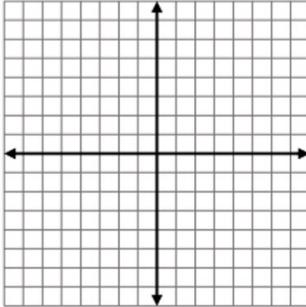
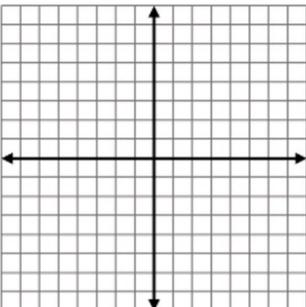
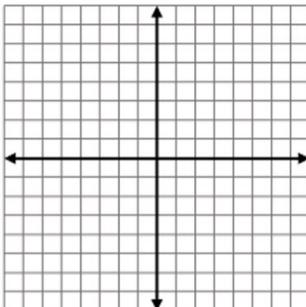
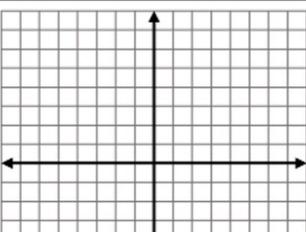
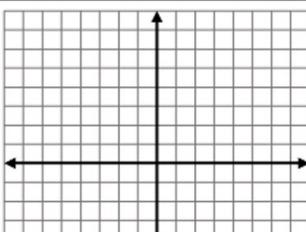
$y = -3/2x + 7$ $m = \underline{-\frac{3}{2}}$ $b = \underline{(0,7)}$ 	$y = -1/4x + 1$ $m = \underline{-\frac{1}{4}}$ $b = \underline{(0,1)}$ 
$y = 5/4x - 3$ $m = \underline{\frac{5}{4}}$ $b = \underline{(0,-3)}$ 	$y = 7/2x + 5$ $m = \underline{\frac{7}{2}}$ $b = \underline{(0,5)}$ 
$y = -2x - 8$ 	

# how the choice board resource works

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

*Graphing Slope-Intercept Form*

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

$y = x - 1$ $m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$		$y = 3x + 4$ $m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$	
$y = 1/2x + 2$ $m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$		$y = 1/3x - 5$ $m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$	
$y = -2x - 4$ $m = \underline{\hspace{2cm}}$		$y = -3x + 6$ $m = \underline{\hspace{2cm}}$	

Assign students the number of problems they need to complete from each column.

Differentiate the choice board worksheet by reducing the number of problems assigned to show mastery.

Students can complete the any problems they want to in each column and in any order.

# how to use this resource

This is a great individual practice activity to use when reviewing how to graph linear functions in slope-intercept form.

My favorite ways to use this choice board is for homework and math practice stations.

This is also a **substitute-friendly** assignment!

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

**ANSWER KEY**

Graphing Slope-Intercept Form

Directions: Choose \_\_\_\_\_ problems from each column. Graph each equation.

$y = x - 1$ $m = 1$ $b = (0, -1)$		$y = 3x + 4$ $m = 3$ $b = (0, 4)$	
$y = 1/2x + 2$ $m = 1/2$ $b = (0, 2)$		$y = -3/2x + 7$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$	$y = -1/4x + 1$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$
$y = -2x - 4$ $m = -2$ $b = (0, -4)$		$y = 5/4x - 3$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$	$y = 7/2x + 5$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$
$y = 3/4x$ $m = 3/4$		$y = -2x - 8$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$	$y = -x - 6$ $m = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$

You may also enjoy ...

## GRAPHING IN SLOPE-INTERCEPT FORM

Collaborative Tesselation

Student work bulletin board

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## GRAPHING IN SLOPE INTERCEPT FORM

Digital & Print Activity Pack

3 Activities

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## SLOPE-INTERCEPT FORM FROM 2 POINTS

Choice Board

Date: _____		Per _____	
Name: _____			
ANSWER KEY		Date: _____	
Directions: Given the two points, write the equation in slope-intercept form. Show your work in the boxes.			
(0, 7)	(0, -5) & (3, 0)	(0, 0)	(-4, 0) & (0, 7)
& (9, 4)	(1, 4) & (5, 6)	(2)	(0, -5) & (3, 0)
3) & (-4, -6)	(-3, -3) & (2, 2)		(-1, -1) & (9, 4)
			(1, 4) & (5, 6)

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check it out!

**Answer Key**  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
**ADDING & SUBTRACTING RATIONAL EXPRESSIONS**  
Directions: Simplify each rational expression. Show your work.

**Solving Systems of Equations**  
Date: \_\_\_\_\_  
Solve each system of equations using substitution or elimination. Check your solution.  
 $2x - 6y = -18$   
 $x = 3y - 9$   
 $4x + 6y = -1$   
 $y = -2x + 3$   
 $y = 2 + 5$   
 $y = 7$   
 $2(3y - 9) - 4y = -18$   
 $6y - 18 - 4y = -18$   
 $-18 = -18$   
infinitely many solutions

**Multiplying & Dividing Rational Expressions**  
Date: \_\_\_\_\_  
Directions: Multiply or divide the rational expressions. Show your work.

**Rational Expression Operations - Addition & Subtraction**  
Directions: Answer each question and type the question number with the matching answer in the answer column to the right.

#	Question	Answer	Type the matching question numbers here
1	$\frac{5}{x} + \frac{3}{x+1}$	$\frac{2x+1}{x+2}$	
2	$\frac{2}{x+4} - \frac{x^2}{x^2-16}$	$-\frac{1}{x^2-1}$	
3	$\frac{x+2}{x^2+4x+4} + \frac{2x}{x+2}$	$\frac{2x^2+2x+5}{x^2+x-2}$	
4	$\frac{x}{x-2} + \frac{3}{x-1}$	$-\frac{x^2+2x-8}{x^2-16}$	
5	$\frac{x}{4x+8} - \frac{1}{x^2+2x}$	$\frac{8x+5}{x^2+1}$	
6	$\frac{x+2}{x-1} + \frac{x-1}{x+2}$	$\frac{x^2-3x+7}{x^2-4}$	
7	$\frac{2x+1}{x^2-4} + \frac{x-3}{x+2}$	$\frac{x^2+2x-6}{x^2-3x+2}$	
8	$\frac{x^2+2x}{x^2-1} - \frac{x+1}{x-1}$	$\frac{x-2}{4x}$	

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hey there!

My name is Malia and I'm passionate about making learning and practicing math fun. I love creating engaging math resources for my students and I hope your students enjoy this activity too!

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