

keep scrolling to
get a sneak peek!

Help your Algebra 1 students practice **finding x and y-intercepts from graphs and equations**. Your students will benefit from being given choice when it comes to how they want to practice math!

X & Y-INTERCEPTS CHOICE BOARD

Math with Ms. Rivera

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ANSWER KEY

Name: _____ Date: _____

X and y-Intercepts Choice Board

Directions: Choose _____ problems from each column. Show your work in the _____

From Graphs	From Equations #1	From Equations #2
<p>x-int: (-2, 0) y-int: (0, 2)</p>	$6x + 8y = 24$ <p>x-int: $6x + 8(0) = 24$ $\frac{6x}{6} = \frac{24}{6}$ $x = 4$ (4, 0)</p> <p>y-int: $6(0) + 8y = 24$ $\frac{8y}{8} = \frac{24}{8}$ $y = 3$ (0, 3)</p>	$6x + 8y = 24$ <p>x-int: $0 = 2x + 4$ $-4 = 2x$ $\frac{-4}{2} = \frac{2x}{2}$ $-2 = x$ (-2, 0)</p>
<p>x-int: (0, 0) y-int: (0, 0)</p>	$3x + 4y = 12$ <p>x-int: $3x + 4(0) = 12$ $\frac{3x}{3} = \frac{12}{3}$ $x = 4$ (4, 0)</p> <p>y-int: $3(0) + 4y = 12$ $\frac{4y}{4} = \frac{12}{4}$ $y = 3$ (0, 3)</p>	$3x + 4y = 12$ <p>x-int: $0 = -\frac{1}{2}x + 2$ $-2 = -\frac{1}{2}x$ $2 = \frac{1}{2}x$ $4 = x$ (4, 0)</p>
<p>x-int: (2, 0) y-int: (0, -1)</p>	$-2x + 5y = -10$ <p>x-int: $-2x + 5(0) = -10$ $\frac{-2x}{-2} = \frac{-10}{-2}$ $x = 5$ (5, 0)</p> <p>y-int: $-2(0) + 5y = -10$ $\frac{5y}{5} = \frac{-10}{5}$ $y = -2$ (0, -2)</p>	$-2x + 5y = -10$ <p>x-int: $0 = -\frac{1}{2}x - 2$ $2 = -\frac{1}{2}x$ $-4 = -x$ $x = 4$ (4, 0)</p>



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.

Finding X & Y-Intercepts Choice Board

Name: _____ Date: _____ Period: _____

Directions: Choose _____ problems from each column. Show your work in the boxes.

From Graphs	From Equations #1	From Equations #2
	$6x + 8y = 24$	$y = 2x - 4$
	$3x + 4y = 12$	$y = 2x - 4$
	$-2x + 5y = -10$	$y = 2x - 4$
	$-3x - 6y = 18$	$y = 2x - 4$
	$5x - 10y = -20$	$y = 2x - 4$

ANSWER KEY

Name: _____ Date: _____ Period: _____

Directions: Choose _____ problems from each column. Show your work in the boxes.

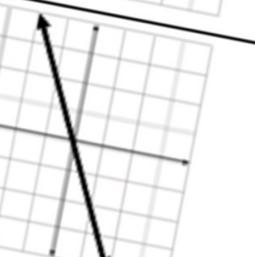
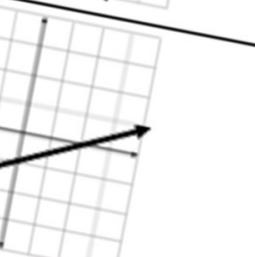
From Graphs	From Equations #1	From Equations #2
 x-int: (-2, 0) y-int: (0, 2)	$6x + 8y = 24$ x-int: $6x + 8(0) = 24$ $6x = 24$ $x = 4$ y-int: $6(0) + 8y = 24$ $8y = 24$ $y = 3$ (0, 3)	$y = 2x - 4$ x-int: $0 = 2x - 4$ $4 = 2x$ $2 = x$ y-int: $y = 2(0) - 4$ $y = -4$ (0, -4)
 x-int: (0, 0) y-int: (0, 3)	$3x + 4y = 12$ x-int: $3x + 4(0) = 12$ $3x = 12$ $x = 4$ y-int: $3(0) + 4y = 12$ $4y = 12$ $y = 3$ (0, 3)	$y = 2x - 4$ x-int: $0 = -\frac{1}{2}x - 2$ $2 = -\frac{1}{2}x$ $-4 = -x$ $x = 4$ y-int: $y = 2(0) - 4$ $y = -4$ (0, -4)
 x-int: (2, 0) y-int: (0, -1)	$-2x + 5y = -10$ x-int: $-2x + 5(0) = -10$ $-2x = -10$ $x = 5$ y-int: $-2(0) + 5y = -10$ $5y = -10$ $y = -2$ (0, -2)	$y = 2x - 4$ x-int: $2x = 3(0) + 15$ $2x = 15$ $x = \frac{15}{2}$ y-int: $y = 2(\frac{15}{2}) - 4$ $y = 15 - 4$ $y = 11$ (0, 11)
 x-int: (-1, 0) y-int: (0, -3)	$-3x - 6y = 18$ x-int: $-3x - 6(0) = 18$ $-3x = 18$ $x = -6$ y-int: $-3(0) - 6y = 18$ $-6y = 18$ $y = -3$ (0, -3)	$5x - 10y = -20$ x-int: $5x - 10(0) = -20$ $5x = -20$ $x = -4$ y-int: $5(0) - 10y = -20$ $-10y = -20$ $y = 2$ (0, 2)

Finding X & Y-Intercepts Choice Board *includes:*

Name: _____ Date: _____ Period: _____

X and y-Intercepts Choice Board

Directions: Choose _____ problems from each column. Show your work in the boxes.

From Graphs	From Equations #1	From Equations #2
	$6x + 8y = 24$	$y = 2x - 4$
	$3x + \dots$	$y = \frac{1}{2}x - 2$
	$-2x + 5y = -10$	$2x = 3y + 15$

A purple arrow points from the 'From Equations #1' column to the 'From Graphs' column.

- ✓ printable worksheet
- ✓ a detailed answer key
- ✓ 3 columns with 5 questions in each - 15 question total
- ✓ Spot to assign how many problems students need to complete

Finding X & Y-Intercepts Choice Board

standards covered:

CCSS: HSA-IF.B.4

TEKs: A1.7.A

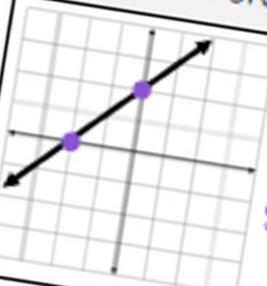
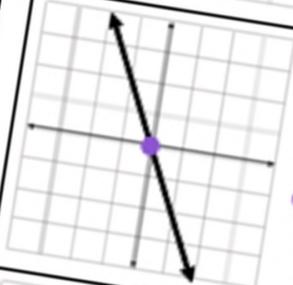
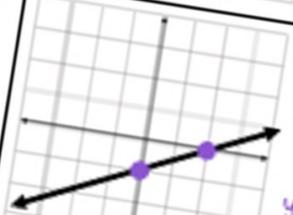
VA SOLs: F.A.7.d

Name: _____ Date: _____ Period: _____

ANSWER KEY

X and Y-Intercepts Choice Board

Directions: Choose _____ problems from each column. Show your work in the boxes.

From Graphs	From Equations #1	From Equations #2
 <p>x-int: $(-2, 0)$ y-int: $(0, 2)$</p>	$6x + 8y = 24$ <p>x-int: $6x + 8(0) = 24$ $\frac{6x}{6} = \frac{24}{6}$ $x = 4$ $(4, 0)$</p> <p>y-int: $6(0) + 8y = 24$ $\frac{8y}{8} = \frac{24}{8}$ $y = 3$ $(0, 3)$</p>	$y = 2x - 4$ <p>x-int: $0 = 2x - 4$ $+4$ $\frac{4}{2} = \frac{2x}{2}$ $2 = x$ $(2, 0)$</p> <p>y-int: $y = 2(0) - 4$ $y = -4$ $(0, -4)$</p>
 <p>x-int: $(0, 0)$ y-int: $(0, 0)$</p>	$3x + 4y = 12$ <p>x-int: $3x + 4(0) = 12$ $\frac{3x}{3} = \frac{12}{3}$ $x = 4$ $(4, 0)$</p> <p>y-int: $3(0) + 4y = 12$ $\frac{4y}{4} = \frac{12}{4}$ $y = 3$ $(0, 3)$</p>	$y = -\frac{1}{2}x - 2$ <p>x-int: $0 = -\frac{1}{2}x - 2$ $+2$ $2 = -\frac{1}{2}x$ $-2 \cdot -\frac{1}{2}x = -2 \cdot -2$ $-4 = x$ $(-4, 0)$</p> <p>y-int: $y = -\frac{1}{2}(0) - 2$ $y = -2$ $(0, -2)$</p>
 <p>x-int: $(2, 0)$ y-int: _____</p>	$-2x + 5y = -10$ <p>x-int: $-2x + 5(0) = -10$ $\frac{-2x}{-2} = \frac{-10}{-2}$ $x = 5$</p> <p>y-int: $-2(0) + 5y = -10$ $\frac{5y}{5} = \frac{-10}{5}$ $y = -2$</p>	$2x = 3y + 15$ <p>x-int: _____</p>

how the choice board resource works

Name: _____ Date: _____ Period: _____

X and Y-Intercepts Choice Board

Directions: Choose _____ problems from each column. Show your work in the boxes.

From Graphs	From Equations #1	From Equations #2
	$6x + 8y = 24$	$y = 2x - 4$
	$3x + 4y = 12$	$y = -\frac{1}{2}x - 2$
	$-2x + 5y = -10$	$2x = 3y + 15$
	$-3x - 6y = 18$	$-2y + 4 - \frac{2}{3}x = 0$

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 find x & y-intercepts from graphs and equations.

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: _____

X and Y-Intercepts Choice Board

Directions: Choose _____ problems from each column. Show your work in the boxes.

From Graphs	From Equations #1	From Equations #2												
<p>x-int: (-2, 0) y-int: (0, 2)</p>	$6x + 8y = 24$ x-int: $6x + 8(0) = 24$ $\frac{6x}{6} = \frac{24}{6}$ $x = 4$ y-int: $6(0) + 8y = 24$ $\frac{8y}{8} = \frac{24}{8}$ $y = 3$	$y = 2x - 4$ x-int: $0 = 2x - 4$ $+4$ $+4$ $\frac{4}{2} = \frac{2x}{2}$ $2 = x$ y-int: $y = 2(0) - 4$ $y = -4$ $(0, -4)$												
<p>x-int: (0, 0) y-int: (0, 0)</p>	<p>Name: _____ Date: _____ Period: _____</p> <h2>X and Y-Intercepts Choice Board</h2> <p>Directions: Choose _____ problems from each column. Show your work in the boxes.</p> <table border="1"> <thead> <tr> <th>From Graphs</th> <th>From Equations #1</th> <th>From Equations #2</th> </tr> </thead> <tbody> <tr> <td> <p>x-int: (2, 0) y-int: (0, -1)</p> </td> <td> $6x + 8y = 24$ </td> <td> $y = 2x - 4$ </td> </tr> <tr> <td> <p>x-int: (-1, 0) y-int: (3, 0)</p> </td> <td> $3x + 4y = 12$ </td> <td> $y = \frac{1}{2}x - 2$ </td> </tr> <tr> <td> <p>x-int: (-4, 0)</p> </td> <td> $-2x + 5y = -10$ </td> <td> $2x = 3y + 15$ </td> </tr> </tbody> </table>		From Graphs	From Equations #1	From Equations #2	<p>x-int: (2, 0) y-int: (0, -1)</p>	$6x + 8y = 24$	$y = 2x - 4$	<p>x-int: (-1, 0) y-int: (3, 0)</p>	$3x + 4y = 12$	$y = \frac{1}{2}x - 2$	<p>x-int: (-4, 0)</p>	$-2x + 5y = -10$	$2x = 3y + 15$
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<p>x-int: (-4, 0)</p>	$-2x + 5y = -10$	$2x = 3y + 15$												

You may also enjoy ...

IDENTIFYING GRAPH CHARACTERISTICS

Choice Board

ANSWER KEY

Identifying Graph Characteristics Choice Board

Directions: Choose ___ problems from each column. Show your work.

Identifying Graph Characteristics Choice Board

Directions: Choose ___ problems from each column.

X-Intercept: _____
Y-Intercept: _____
Zero: _____
 $f(x) = 2, x =$ _____
 $x = 6, f(x) =$ _____

X-Intercept: (-4, 0)
Y-Intercept: (0, 4)
Zero: $x = -4$
 $f(x) = 2, x =$ -2
 $x = 6, f(x) =$ -2

X-Intercept: _____
Y-Intercept: _____
Zero: _____
 $f(x) = -2, x =$ _____
 $x = 6, f(x) =$ _____

X-Intercept: (3, 0)
Y-Intercept: (0, 6)
Zero: $x = 3$
 $f(x) = -2, x =$ 4
 $x = 6, f(x) =$ -6

X-Intercept: _____
Y-Intercept: _____
Zero: _____
 $f(x) = -2, x =$ _____
 $x = 6, f(x) =$ _____

X-Intercept: (6, 0)
Y-Intercept: (0, -3)
Zero: $x = 6$

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IDENTIFYING SLOPE & Y-INTERCEPTS

#	Equation	Slope	Y-int
1	$y = 4x - 5$		
2	$y = 2/3x + 1$		
3	$y = -6/5x - 1$		
4	$y = 1/2x$		
5	$x + 3y = 12$		
6	$4x + 5y = -10$		
7	$3x - 2y = -2$		
8	$7x + y = -3$		
9	$x + 2y = 2$		
10	$4x - y = 0$		
11	$x + y = -2$		
12	$3x + 2y = -4$		

Directions: Look at each equation and identify the slope & the y-intercept.

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Self-Checking

IDENTIFYING X & Y INTERCEPTS FROM GRAPHS

Identifying X & Y-Intercepts from Graphs

Directions: Answer each question and find your answer in the answer bank. Type the corresponding letter in the answer column. If you are correct, it will turn green. If you are incorrect, it will turn red.

$(-3, 0)$ & $(0, 2)$	$(-1, 0)$ & $(0, 2)$
$(3, 0)$ & $(0, -4)$	No x-int & $(0, 2)$
$(-2, 0)$ & $(0, -1)$	$(-4, 0)$ & $(0, 3)$
$(-3, 0)$ & $(0, -2)$	
$(2, 0)$ & No y-int	
$(0, 0)$ & $(0, 0)$	

Answer Bank

A	B	C
D	E	F
G	H	I

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Self-Checking

Free Algebra Activities!

When you join my email list, I'll send you a free Algebra print & digital self-checking activities. There is an Algebra 1 and Algebra 2 version!

You'll also be getting exclusive freebies and content to help your Algebra students be successful this school year!

check it out!

The image shows a collage of algebra worksheets and a digital tablet. The worksheets include:

- Answer Key** for **ADDING & SUBTRACTING RATIONAL EXPRESSIONS** and **SOLVING SYSTEMS OF EQUATIONS**.
- MULTIPLYING & DIVIDING RATIONAL EXPRESSIONS** worksheet with problems like $\frac{x-2}{x^2+2x+1}$.
- SOLVING SYSTEMS OF EQUATIONS** worksheet with problems like $2. 2x - 6y = -18$ and $x = 3y - 4$.

The digital tablet displays a self-checking activity titled **Rational Expression Operations - Addition & Subtraction**. The directions are: "Answer each question and type the question number with the matching answer in the answer column to the right." The activity consists of a table with 8 questions and 8 answers. A path is drawn through the table, starting from question 1, moving right to answer 1, then up to question 2, right to answer 2, up to question 3, right to answer 3, up to question 4, right to answer 4, up to question 5, right to answer 5, up to question 6, right to answer 6, up to question 7, right to answer 7, and finally up to question 8, right to answer 8.

#	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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