

Warmup:

1. Evaluate the expression.

$$5 - 9 + 4 - 6$$

2. Evaluate the expression.

$$7 - 3 - 2 - 9$$

3. Calculate:

$$-4 - 10$$

$$5 - -2$$

$$-6 - -4$$

$$7 - -3$$

4. Simplify.

$$--- 50$$

5. Simplify.

$$----- 30$$

I. Mental Parentheses in Addition and Subtraction

Using mental parentheses to simplify expressions.

1. Combine the positive numbers

$$1 - 4 + 5 - 8$$

$$1 + 5 - 4 - 8$$

2. Combine the negative numbers

$$6 - 12$$

3. Combine the two sums from steps 1 and 2.

$$-6$$

Evaluate the expression using mental parentheses.

$$5 - 9 + 4 - 6$$

Evaluate the expression using mental parentheses.

$$7 - 3 - 2 - 9$$

6. Evaluate the expression.

$$-6 - 5 - 8 + 9$$

7. Evaluate the expression.

$$2 + 1 - 5 - 4$$

8. Evaluate the expression.

9. Evaluate the expression.

II. Simplifying numbers with multiple signs

Simplify: $-^+6+^+10+^+4+^+5$

Change $++$ to $+$

Change $--$ to $+$

Change $+-$ to $-$

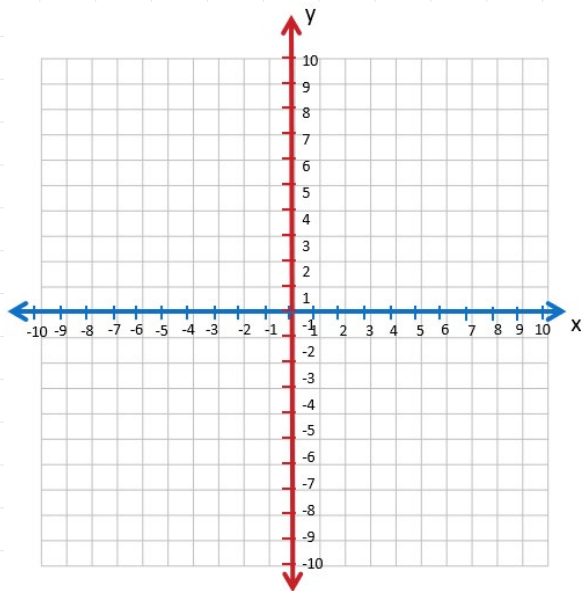
Change $-+$ to $-$

10. Simplify $-^+5-^-6+^-10+^+8$

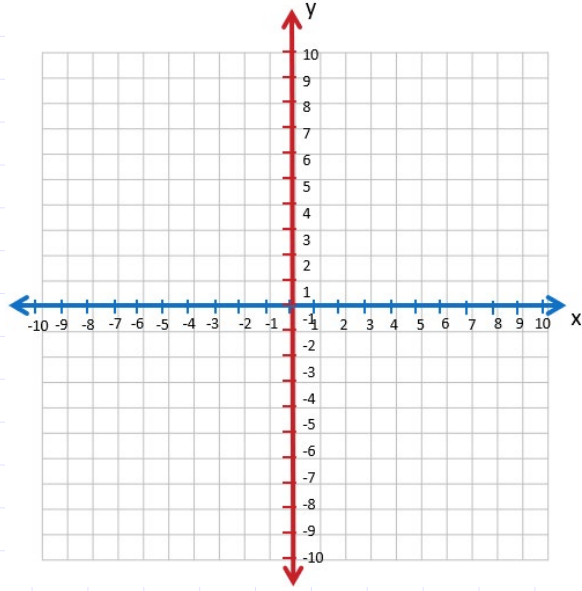
11. Simplify

III. Practice

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Success Check # _____

Name:

Date:

Lesson 97 is very different than all the other lessons in this course.

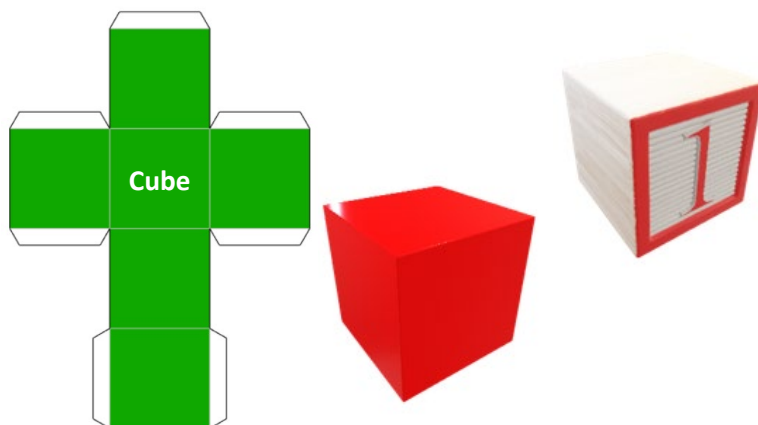
For Lesson 97 do the following:

- 1- print the pages for constructing 3D shapes
- 2- Cut out each Net
- 3- Use tape to construct each shape

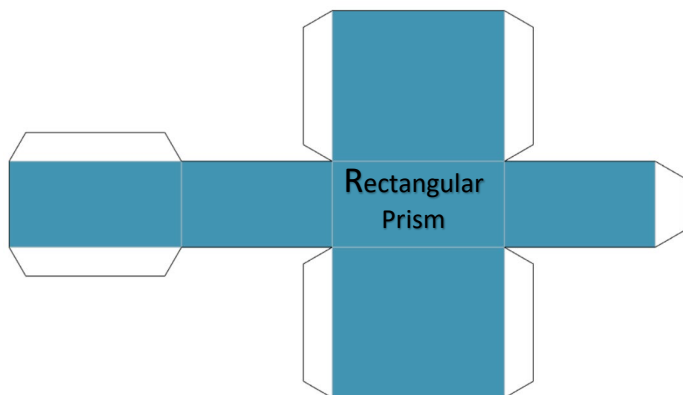
Due to the amount of time, it will take to cut and construct the 3D shapes less Practice questions are in this lesson.

I. Construct the NETS

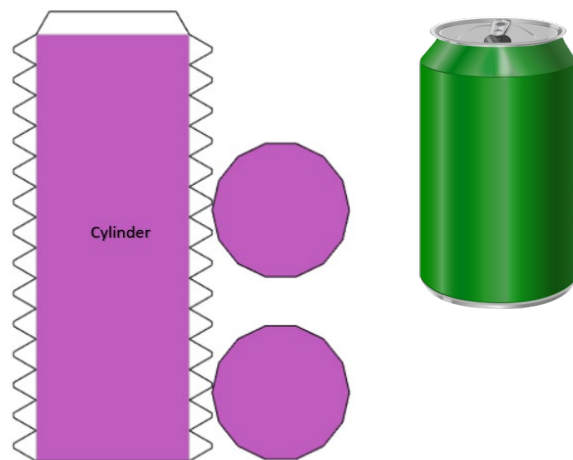
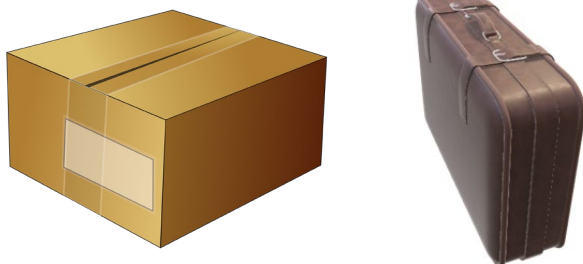
A **net** of a 3D shape is what the shape looks like when it is opened and placed flat on a plane(surface).



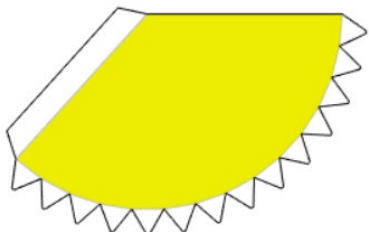
Cube: All 6 faces are squares



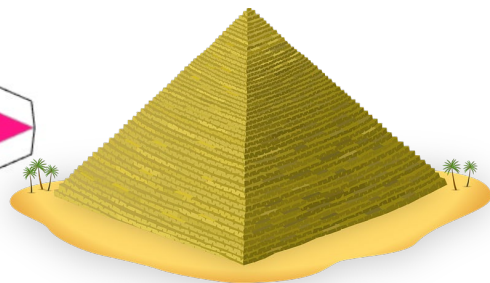
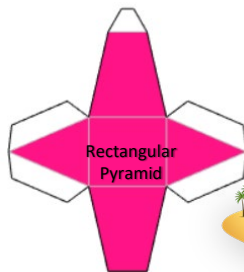
Rectangular Prism: All 6 faces are rectangles. (They are not required to be squares)



Cylinder: The top and bottom are circles (These are not really circular – they are intentionally made this way to help you build the cylinder)

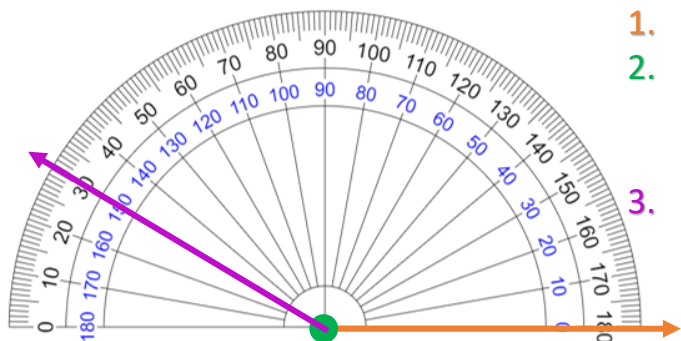


Cone: Made with one circle. The opposite end comes to a point.



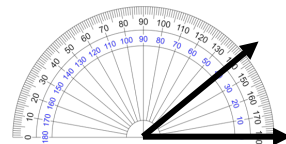
Rectangular Pyramid: The base is a rectangle, the sides come to a point at the top. (The base can be a square, a rectangle with 4 congruent sides.)

II. Drawing Angles given the measurement

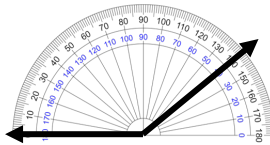


To Draw a 150 degree angle:

1. Draw the bottom ray
2. Place the point of the second ray at the same point as the first ray.
3. Draw the ray such that it crosses through the measurement of the angle.

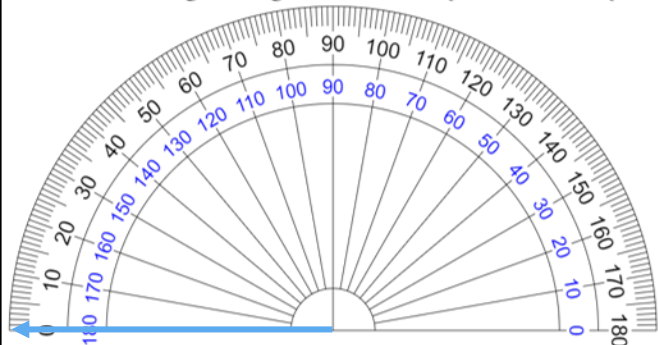


The measurement of this angle is 40 degrees.

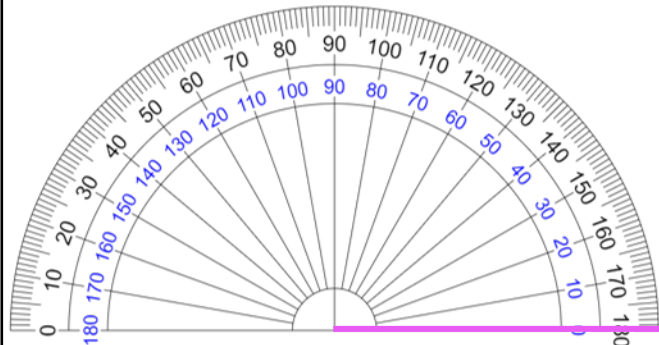


The measurement of this angle is 140 degrees.

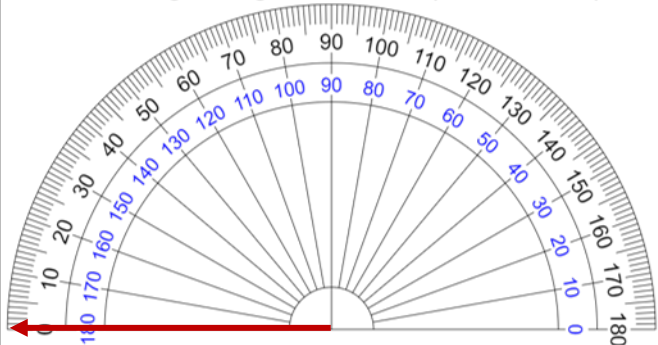
Draw a 110 degree angle. The first ray is drawn for you.



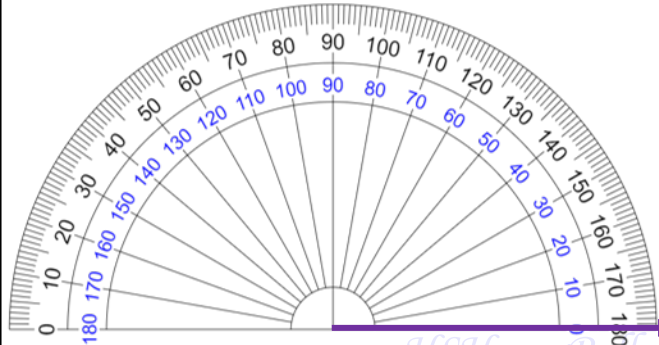
Draw a 110 degree angle. The first ray is drawn for you.



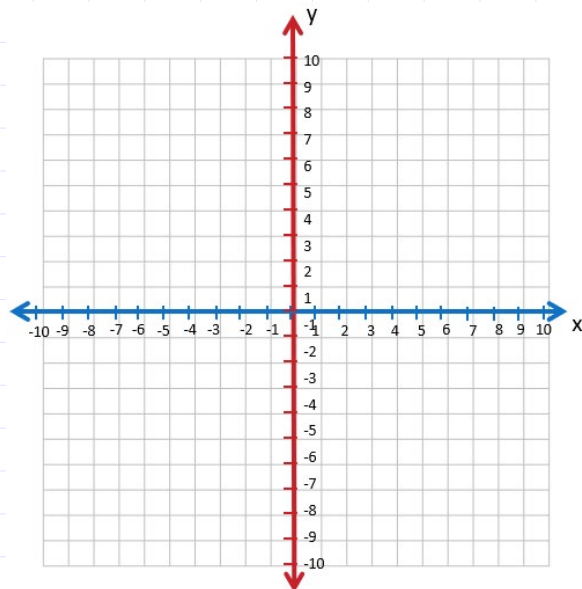
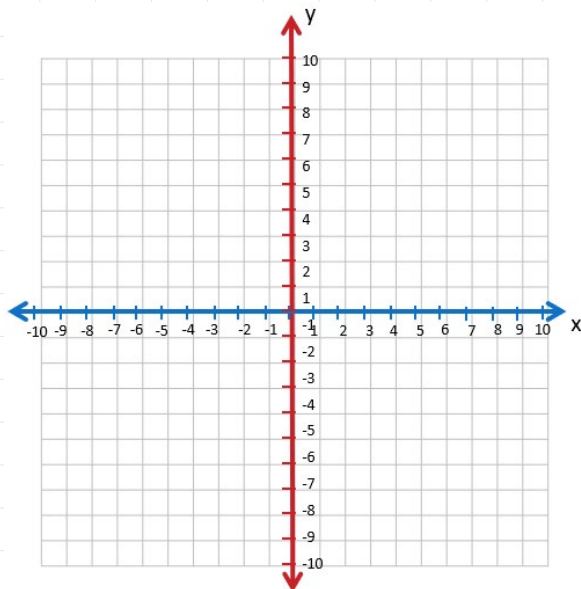
Draw a 55 degree angle. The first ray is drawn for you.



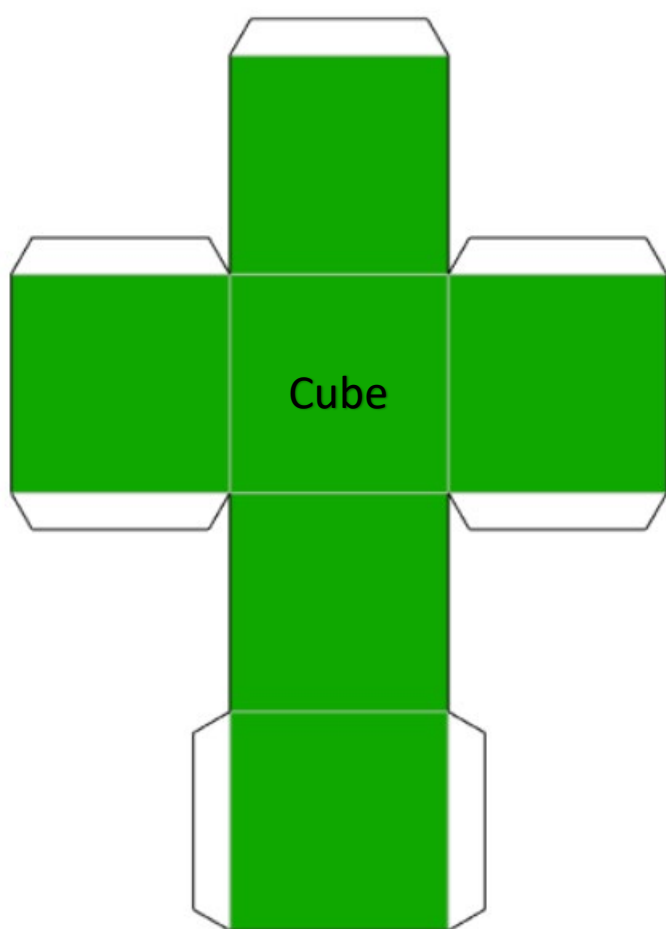
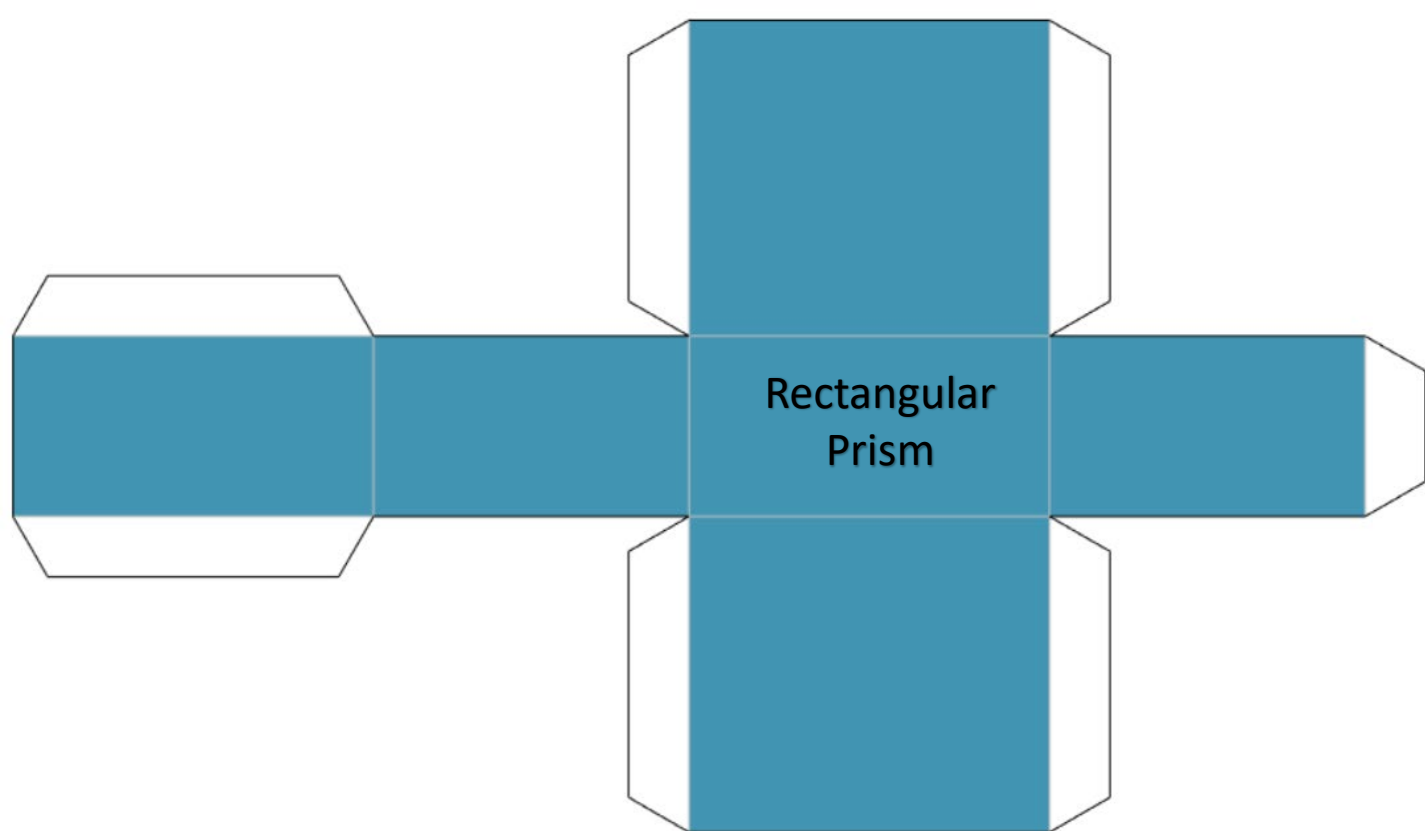
Draw a 75 degree angle. The first ray is drawn for you.

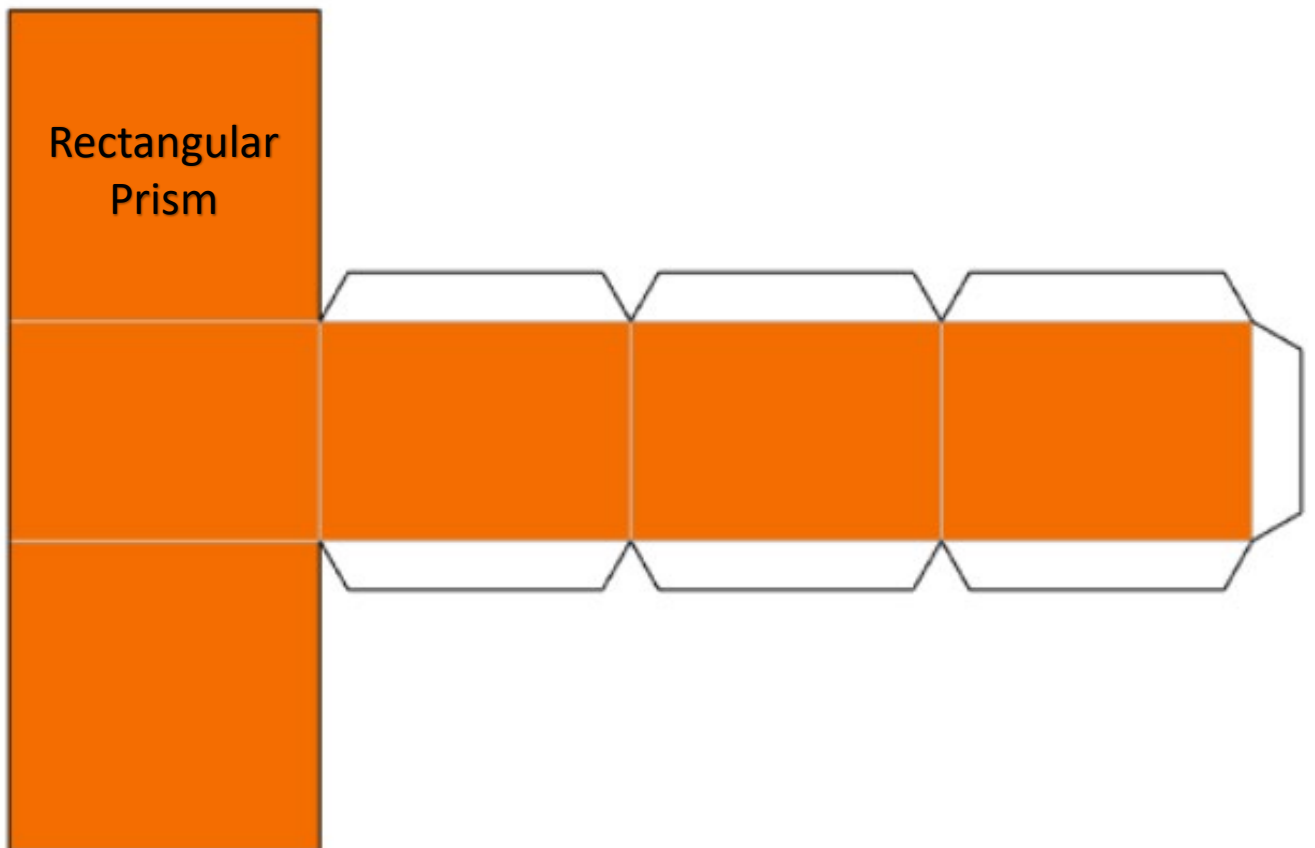
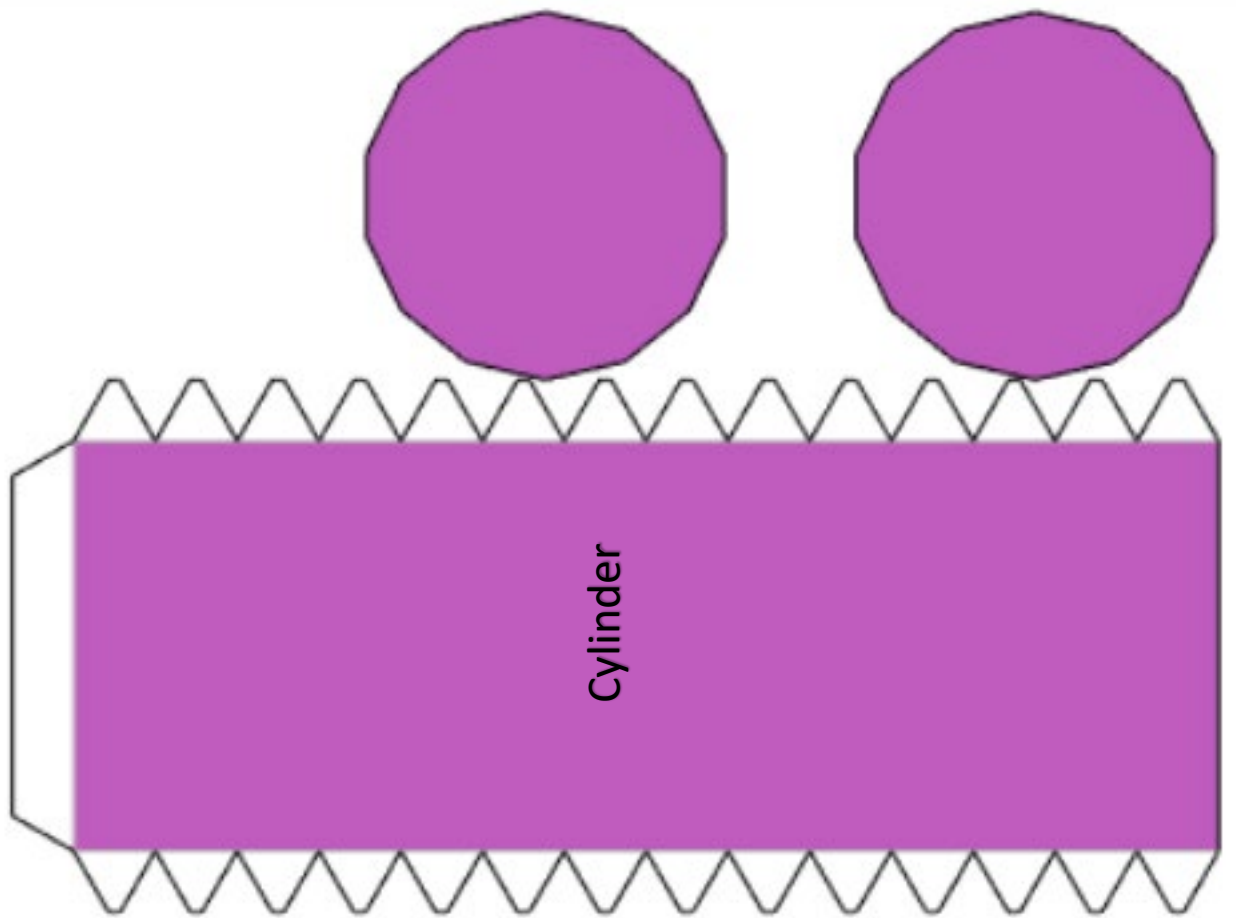


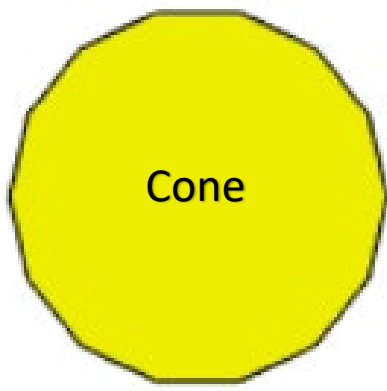
II. Practice (Write a number in each box. Use the coordinate planes for the appropriate questions.)



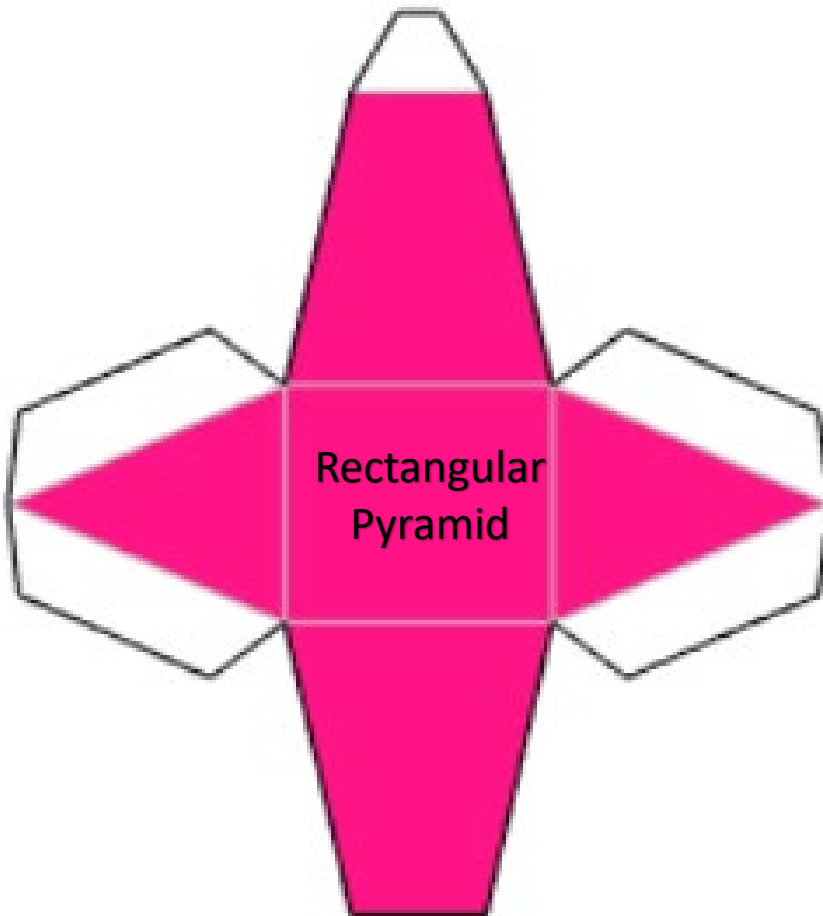
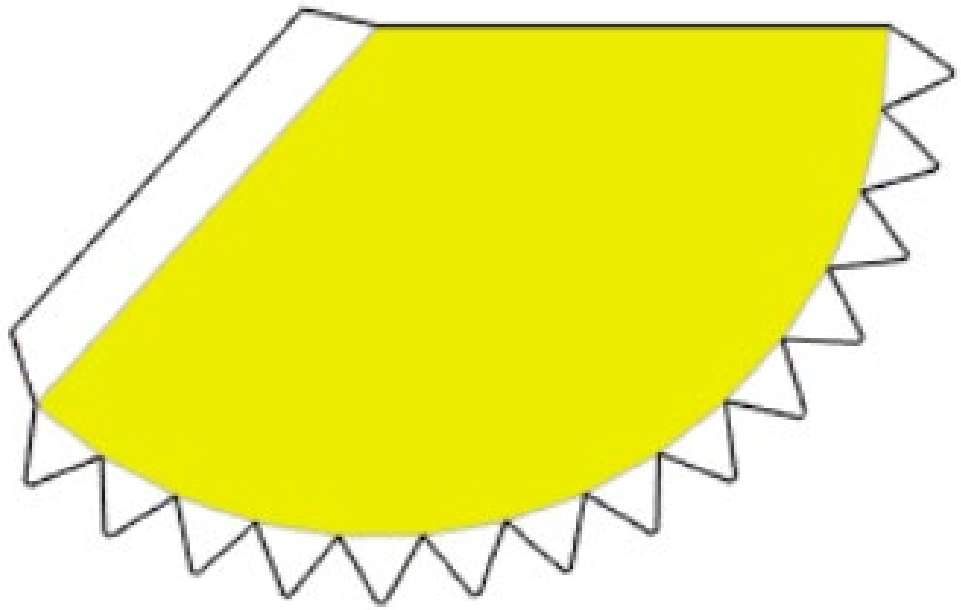








Cone



Rectangular
Pyramid

Success Check # _____

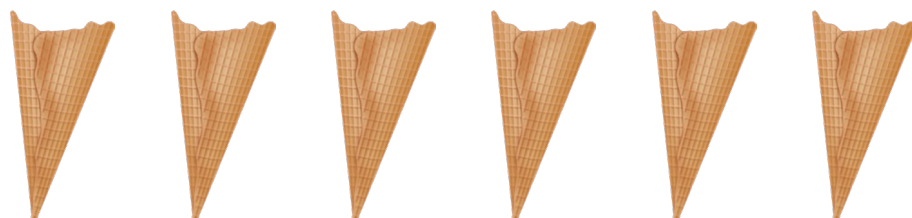
Name:

Date:

Warmup:

1. $5 \times 4 \times 3 \times 2 \times 1$

2. A restaurant serves three flavors of ice-cream. If a customer asks for 1 scoop of each flavor, what different ice cream cones can be made?



I. Factorial

Factorial: Notation that means to multiply all whole numbers from 1 to the number

The symbol for factorial is ! (the exclamation point)

3! means $3 \times 2 \times 1 =$ _____

4! means $4 \times 3 \times 2 \times 1 =$ _____

$$5! =$$

$$2! =$$

3. $3! =$

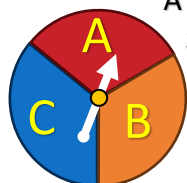
$$3! = 3 \cdot \underline{\hspace{1cm}}!$$

$$5! = 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1$$

$$4! = 4 \cdot \underline{\hspace{1cm}}!$$

$$5! = 5 \cdot \underline{\hspace{1cm}}!$$

II. Tree Diagrams



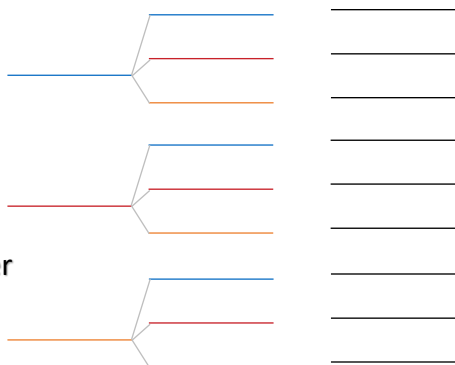
A 3-choice
Spinner

What are the possible outcomes of spinning a three-choice spinner twice? The first spin determines the color, the second spin determines the letter.

First
Spin

Second
Spin

Outcomes



How many possible outcomes are there from spinning the 3-choice spinner twice?

How can we obtain the number of possible outcomes without drawing a tree diagram?

4. How many possible outcomes are there when a 4-choice spinner is spun twice?

5. How many possible outcomes are there when a 4-choice spinner is spun then a standard 6-sided die is rolled?

6. Draw a tree diagram to represent the different orders three people can stand in line.

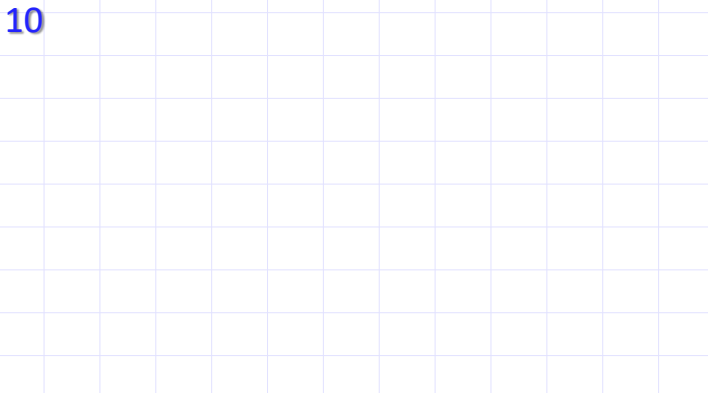
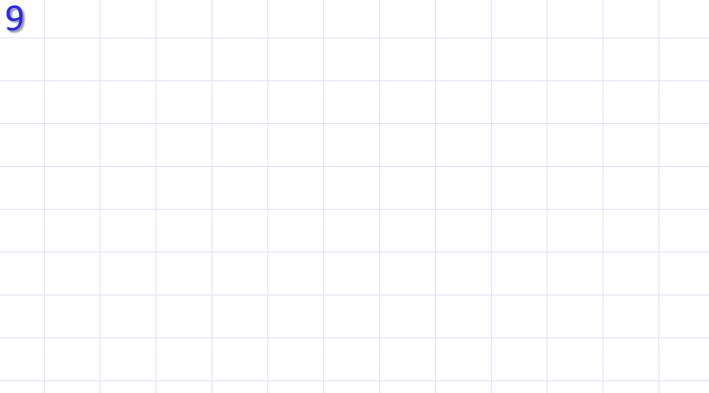
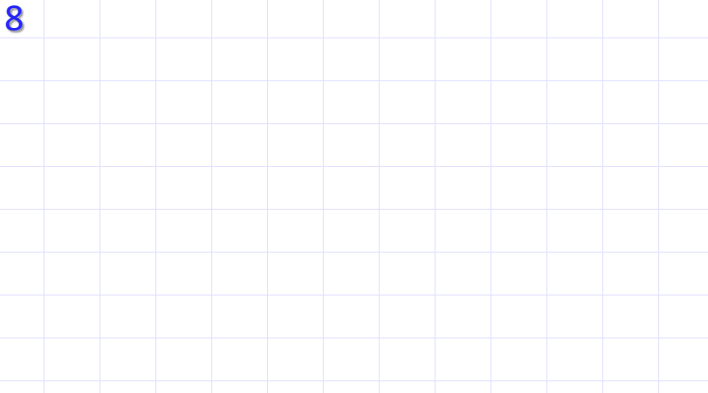
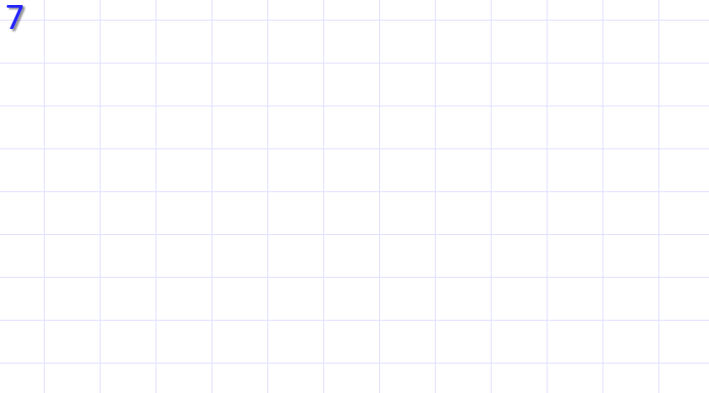
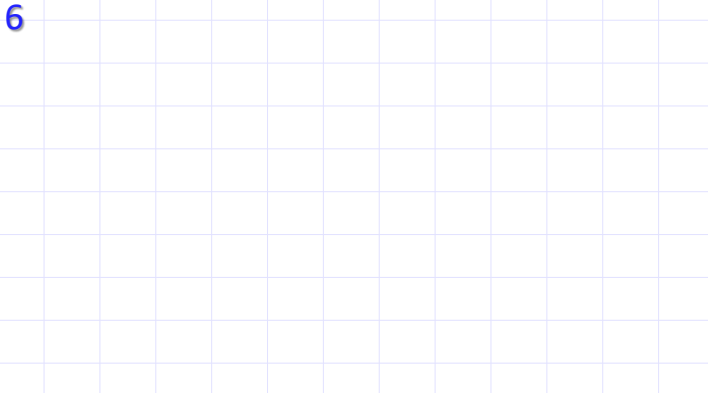
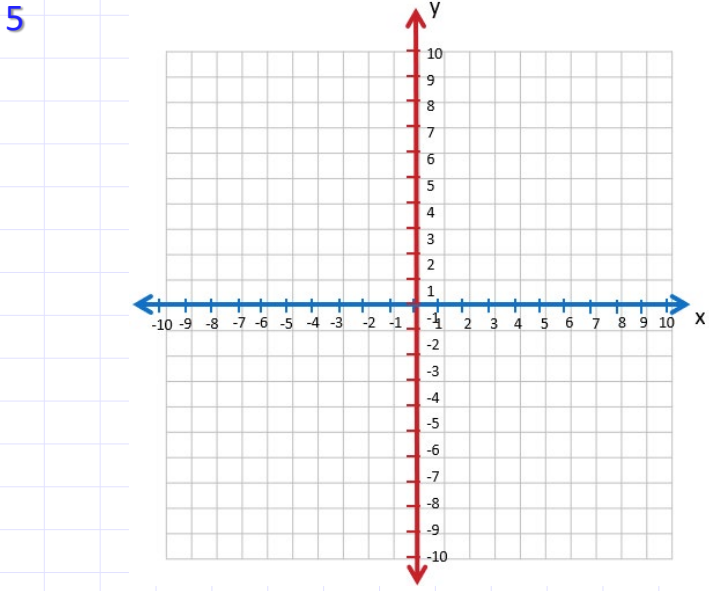
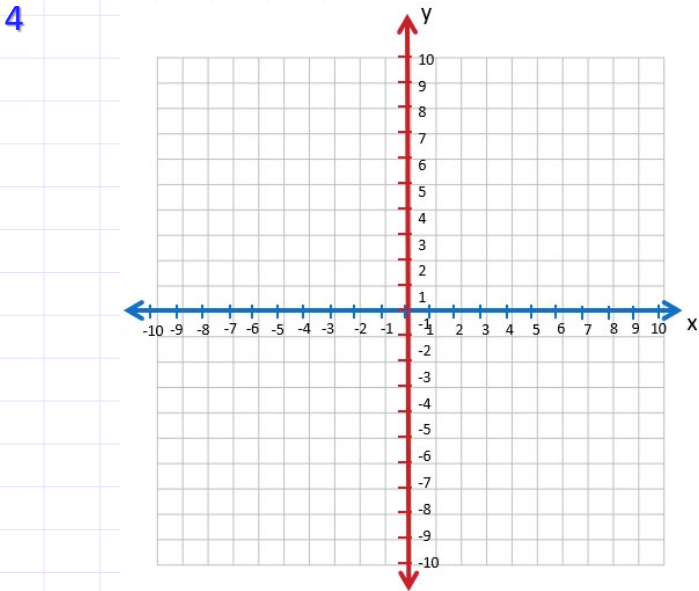
Connor, Logan, and
Nate are standing in line



Draw a tree diagram to represent the possible results of selecting two marbles from a bag of 4 different colored marbles. The first marble will be put back in the bag before picking the second marble.

Will the results be different if the first marble is not returned to the bag before selecting the second marble? _____ Explain your answer

III. Practice



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Success Check # _____

Name:

Date:

Warmup:

1. $\frac{x}{10} + 5 = 15$

2. $6x = 1.8$

3. $(\frac{10}{21})(\text{---}) = 1$

4. $(\text{---})\left(\frac{2}{3}\right)x = x$

I. Fractions and Their Reciprocals

The reciprocal is found by flipping a fraction .

(Swap the numerator and denominator)

$(\frac{3}{52})(\text{---}) = 1$

A fraction multiplied by its reciprocal
will always _____

5. The reciprocal of $\frac{7}{9}$ is _____ because $(\frac{7}{9})(\text{---}) = 1$

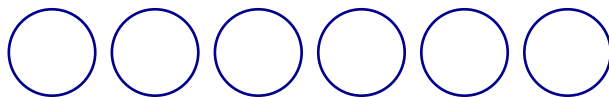
II. A fraction of a number

To determine a fraction of a number:

1. Divide by the _____.

2. Multiply by the _____.

What is $\frac{5}{6}$ of 36?



III. Using Reciprocals to Solve Equations

What is the goal when solving an equation? _____

Solve and Check:

$$\frac{3}{4}x + 3 = 15$$

Solve and Check:

$$\frac{11}{6}x - 10 = 2$$

You may leave the answer as a fraction on the computer

Type $\frac{3}{4}$ as

6. *Solve and Check:*

$$\frac{3}{10}x + 7 = 13$$

7. *Solve and Check:*

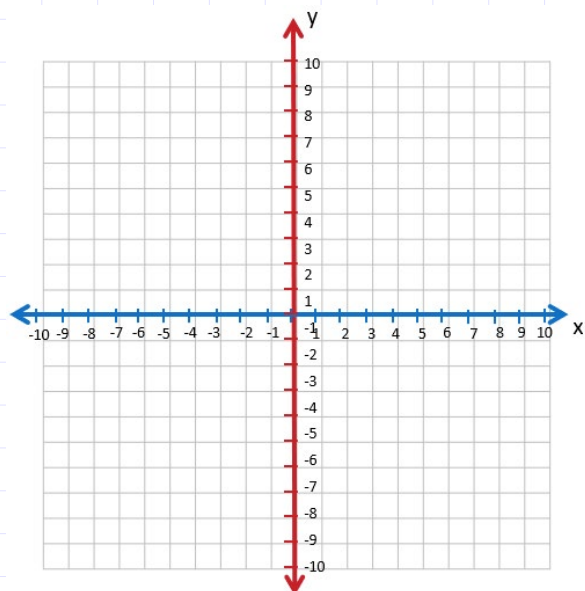
$$\frac{12}{5}x - 8 = 52$$

8. *Solve and Check:*

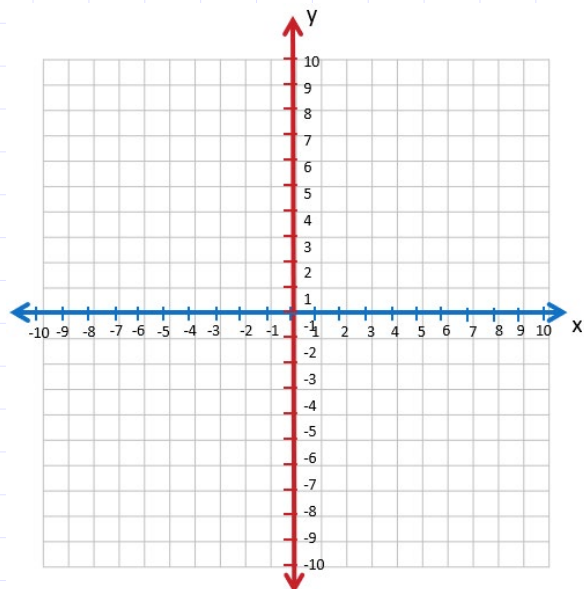
$$\frac{12}{5}x - 8 = 52$$

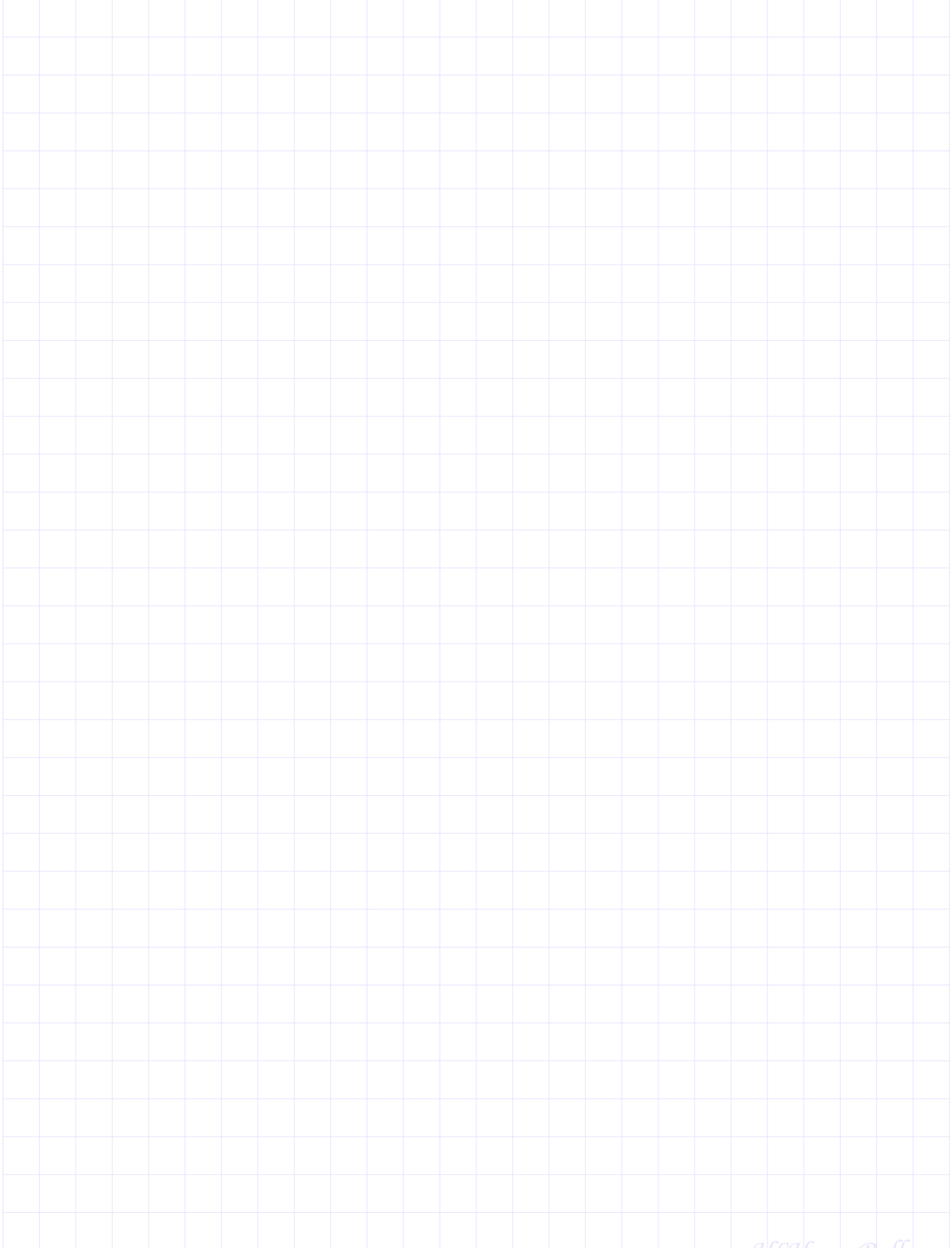
III. Practice

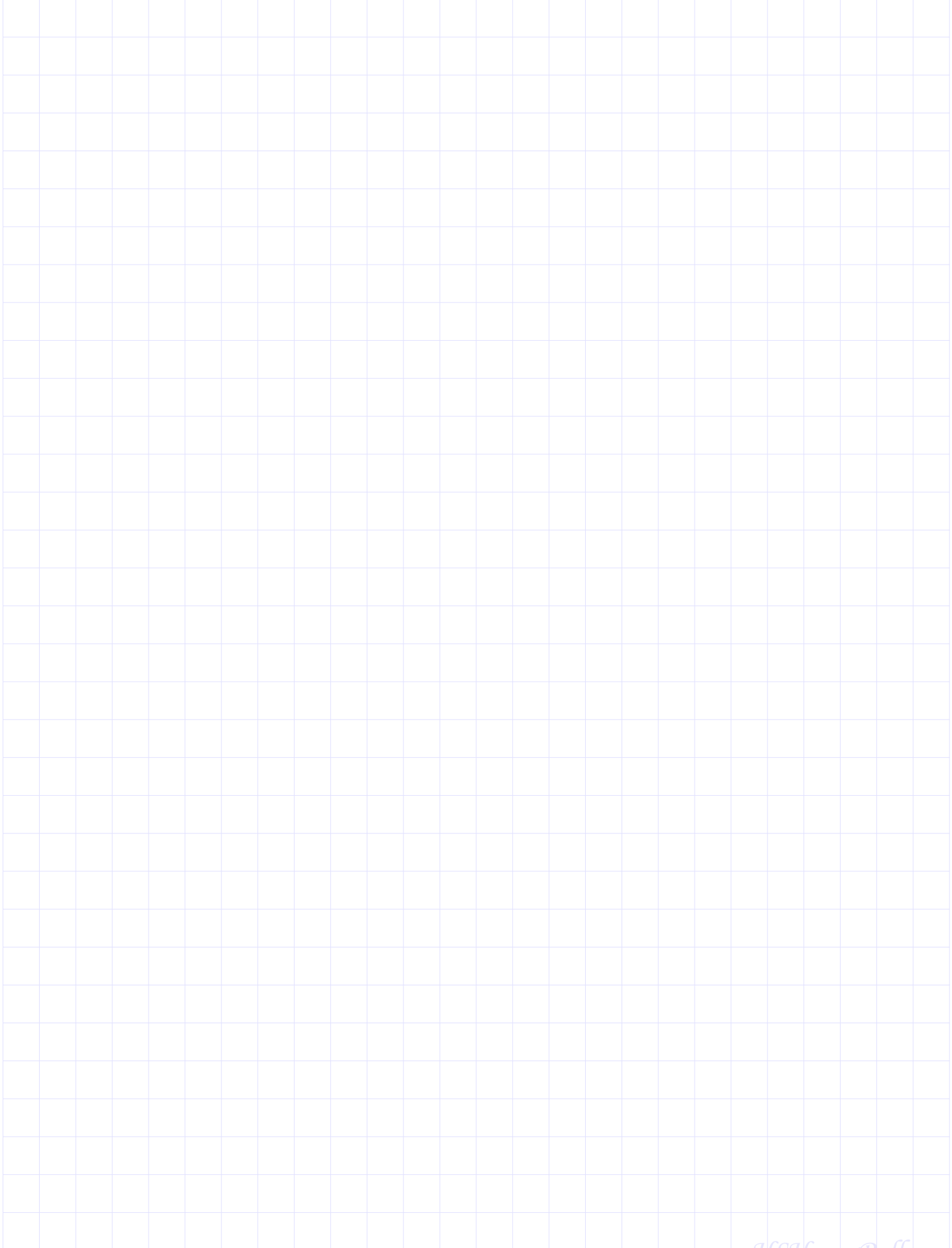
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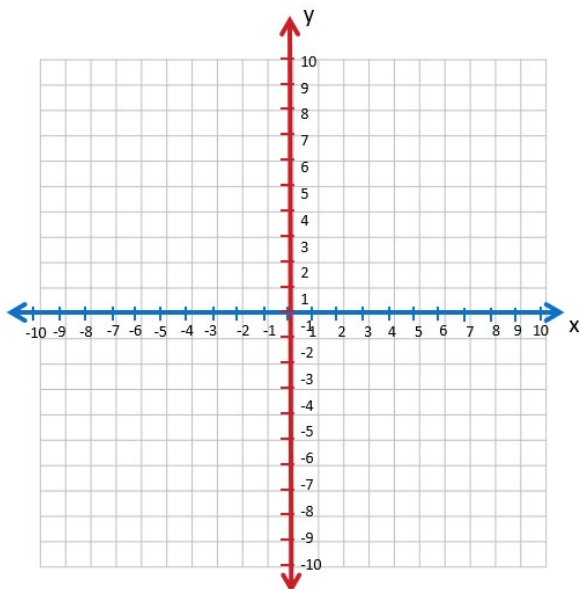
Success Check # _____

Name:

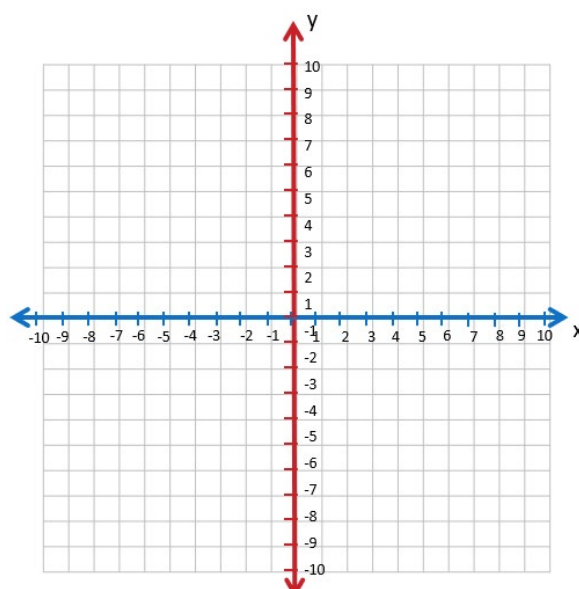
Date:

Warmup:

1. $y =$ _____



2. $y =$ _____



I. Determine the Point of Intersection of Linear Equations Graphically

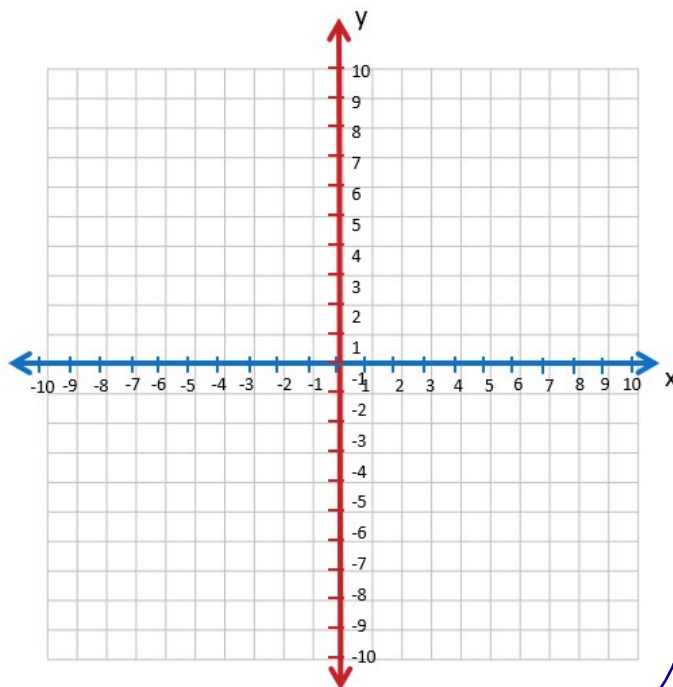
To determine the point of intersection of linear equations:

1. Graph the first equation.
2. Graph the second equation.
3. Determine the coordinates of the point of intersection.

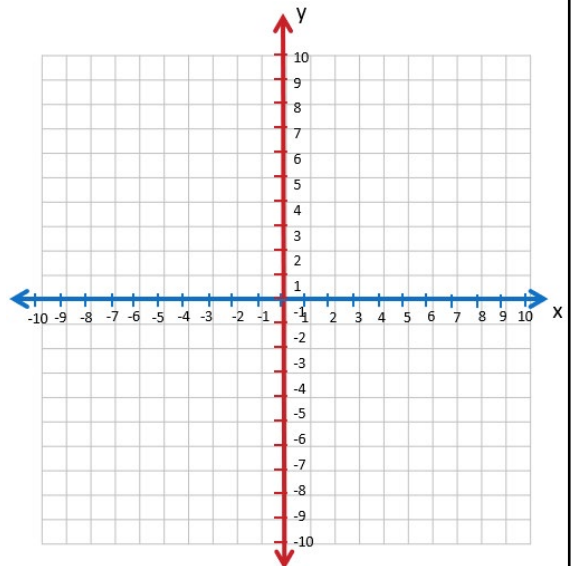
Graph the following linear equations to determine the point of intersection.

$$y = x - 6$$

$$y = -\frac{4}{3}x + 1$$

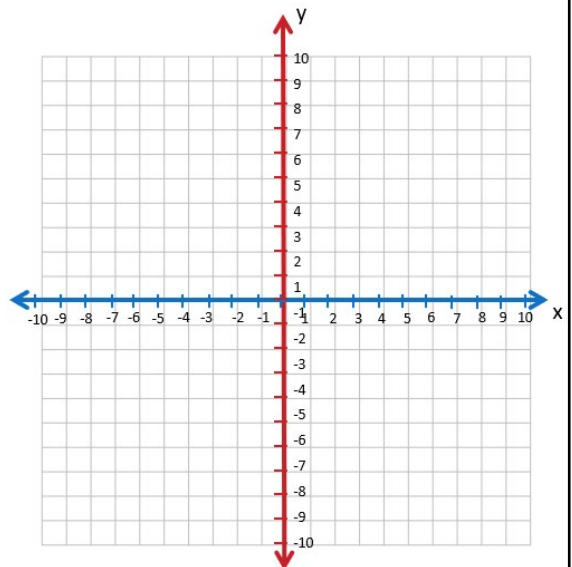


3. Graph the equation $y = 3x - 3$ (use blue ink) and $y = 2x$ (use orange ink) using the slope and y-intercept.



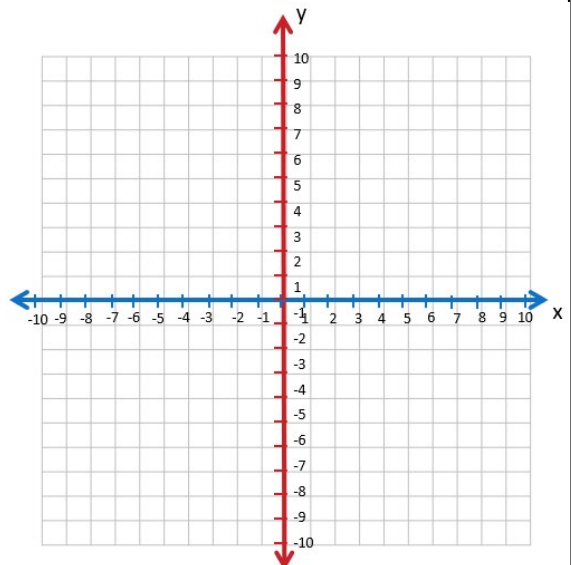
The point of intersection is (,)

4. Graph the equation $y = -4x + 2$ (use blue ink) and $y = 2x - 4$ (use orange ink) using the slope and y-intercept.



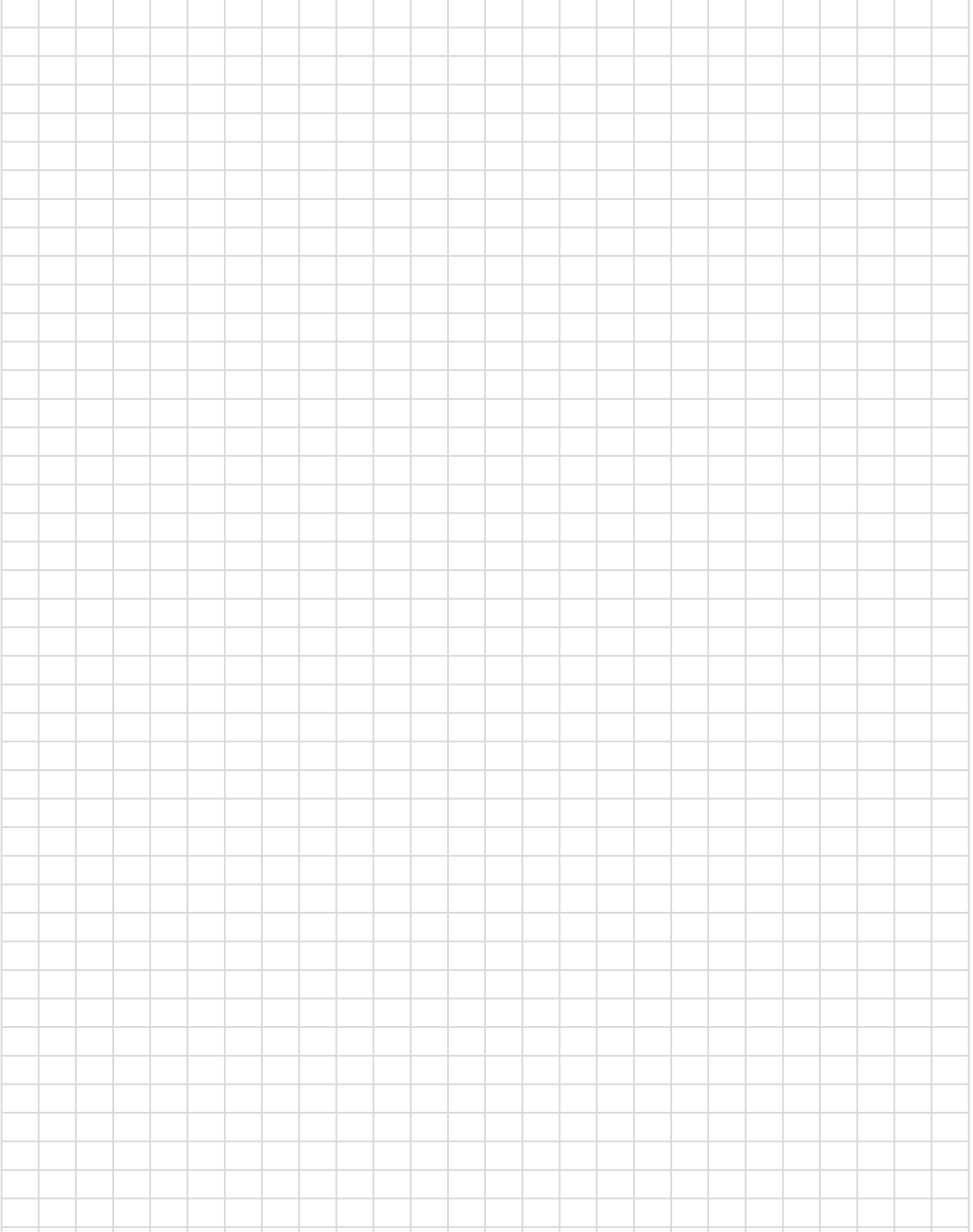
The point of intersection is (,)

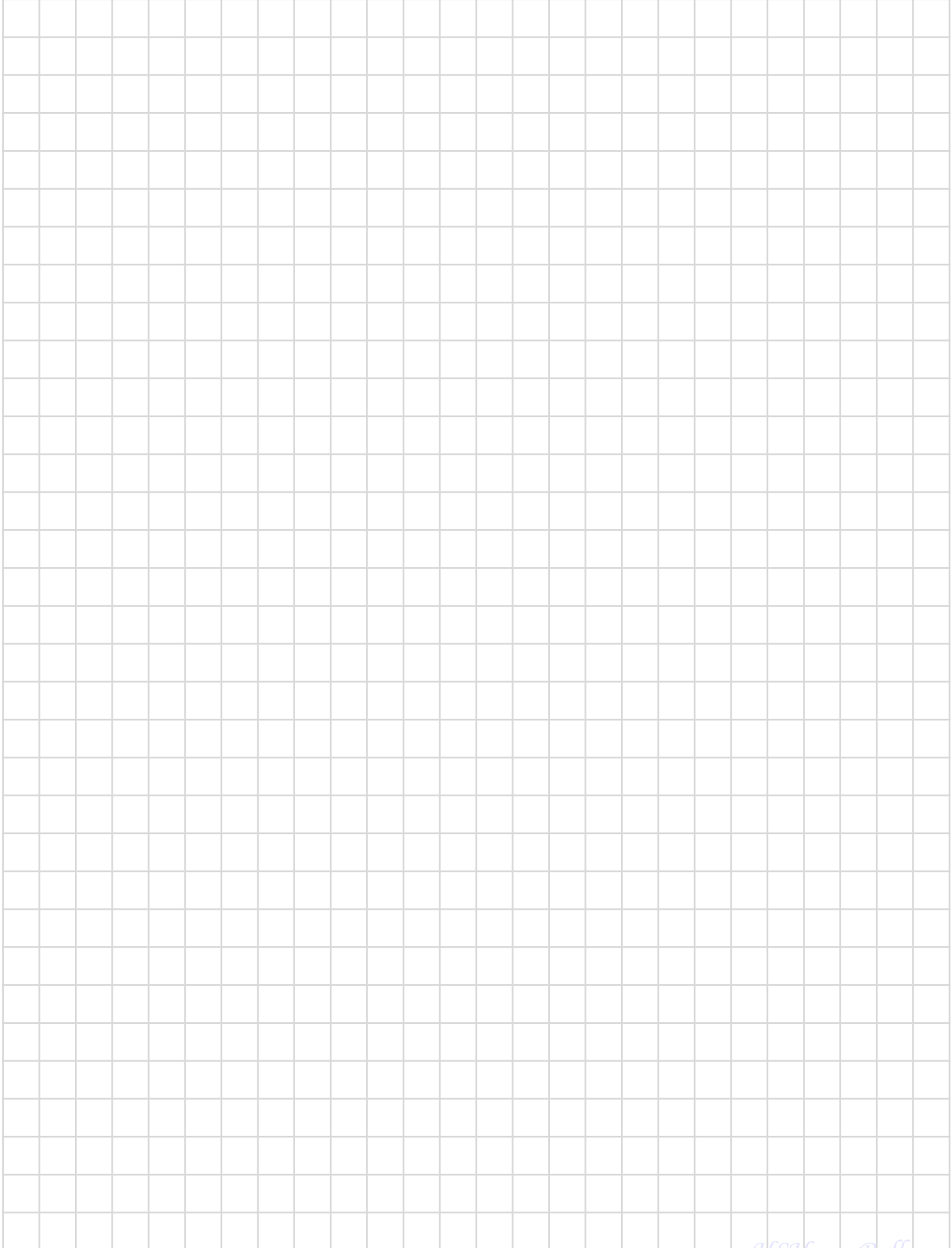
5. Graph the equation $y = -2x - 3$ (use blue ink) and $y = 3x - 13$ (use orange ink) using the slope and y-intercept.



The point of intersection is (,)

Practice (Use the following pages for the practice. Make a coordinate plane as necessary)





Success Check # _____

Name:

Date:

Name: _____

Attempt #: _____

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Name:

Attempt #:

Test # ____ Answer Sheet

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