Lesson # 25

Area and Perimeter of Rectangles and Squares

Date

Warmup

1. Polygon Identification

2.

1^2 = _____
2^2 = _____
3^2 = _____
4^2 = _____
5^2 = _____
6^2 = _____
7^2 = _____

8^2 = _____
9^2 = _____
10^2 = _____
11^2 = _____
12^2 = _____
13^2 = _____
14^2 = _____
15^2 = _____

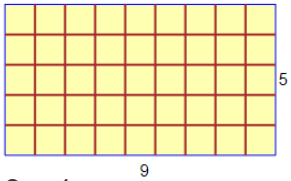
3.

6 – 5 = ____
-7 - -2 = ____
-1 - 8 = ____
-9 - 3 = ____

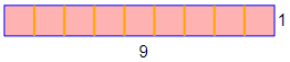
4.

4 + 7 = ____
6 + -5 = ____
-8 + -10 = ____
-10 + 6 = ____

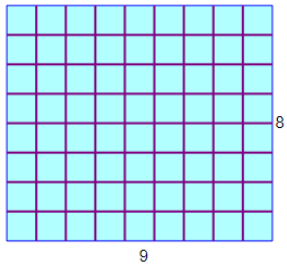
5. 9 x 5 = ____



9 x 1 = ____



9 x 9 = ____

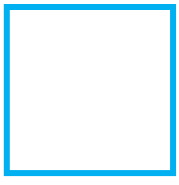


I. Rectangles and Squares

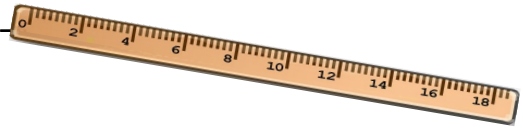
Congruent: Equal in measure (**The *symbol on the computer is* ≡ *hand written is***)

What is a rectangle?

What is a square?



What is used to measure distance? _____

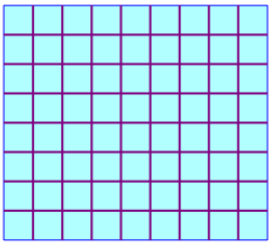


Units for measuring distance:

Area:

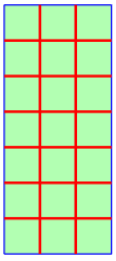
Area is the amount of square units of surface in a geometric figure.

II. Area of Rectangles



8 inches

9 inches



7 inches

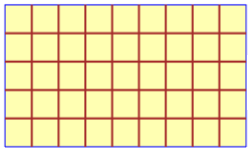
3 inches

Formula for Area of a Rectangle:

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Use Square units.

Area = length x width

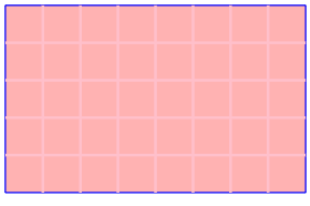
$A = lw$



width

length

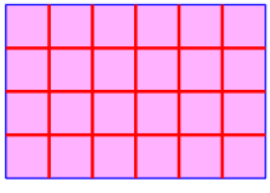
Calculate the Area of a rectangle with length= 7cm and width = 3 cm



3 cm

7 cm

Calculate the Area of a rectangle with length= 6 miles and width = 4 miles



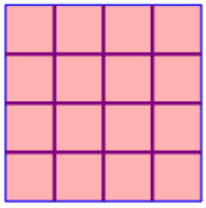
4 miles

6 miles

8. Calculate the Area of each Rectangle

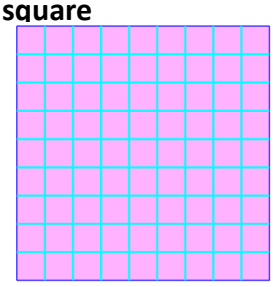
III. Area of Squares

Calculate the Area of a square with side = 4 inches.



4 inches

Calculate the Area of a square with side = 9 inches.



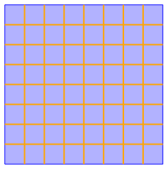
9 inches

Formula for Area of a Square:

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Use Square units.

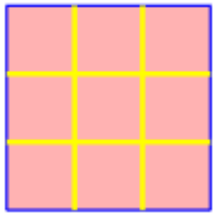
$\text{Area} = \text{side}^2$

$A = s^2$



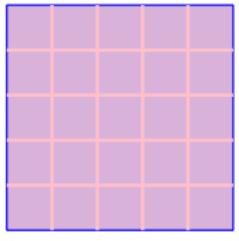
side

Calculate the Area of a square when the side equals 6 miles.



6 miles

Calculate the Area of a square with each side equal to 5 miles



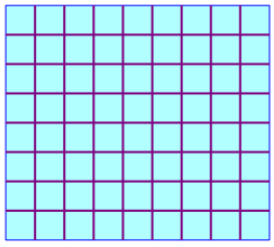
5 miles

9. Calculate the Area of each Square

IV. Perimeter of Rectangles

Perimeter: Perimeter is the distance around a geometric figure.

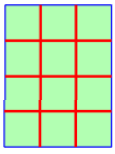
Calculate the Perimeter



8 inches

9 inches

Calculate the Perimeter



4 miles

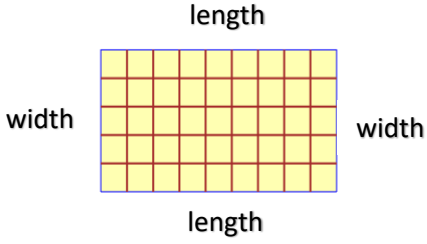
3 miles

Formula for Perimeter of a Rectangle:

Perimeter = length + length + width + width

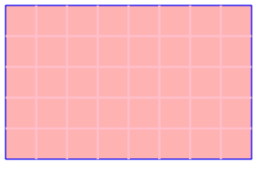
$P = 2l + 2w =$

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Write the units.



Calculate the Perimeter of a rectangle with length= 8cm and width = 5 cm

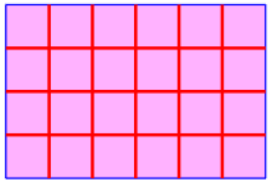
5 cm



8 cm

Calculate the Perimeter of a rectangle with length= 6 miles and width = 4 miles

4 miles

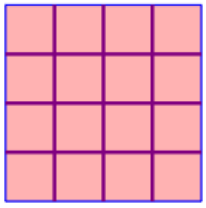


6 miles

10. Calculate the Perimeter of each Rectangle

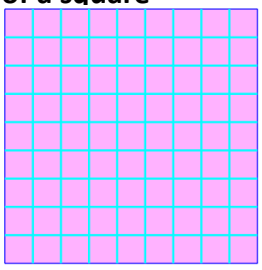
V. Perimeter of Squares

Calculate the Perimeter of a square with side = 4 inches.



4 inches

Calculate the Perimeter of a square with side = 9 inches.



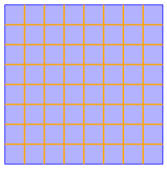
9 inches

Formula for Perimeter of a Square:

1. Write the formula.
2. Substitute in the known values.
3. Simplify
4. Write the units.

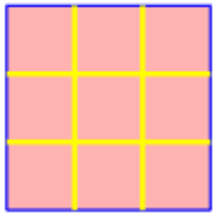
Perimeter = 4 x side

P = 4s



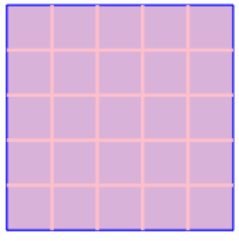
side

Calculate the Perimeter of a square when the side equals 6 miles.



6 miles

Calculate the Perimeter of a square with side = 5 miles.



5 miles

11. Calculate the Area of each Square

VI. Word Problems with Perimeter and Area

The perimeter of a square is 40 meters. What is the length of each side?

Find the width of a rectangle when the area = 105 square km and the length is 15 km.

To solve perimeter and area problems:

1. Write the formula.
2. Substitute in the known values.
3. Solve for the unknown amount
4. Use the correct units.

12. The perimeter of a square is 28 km. What is the length of each side?

13. Find the width of a rectangle when the area = 108 square yards and the length is 12 yards.

Learning is a continuous process.

Lesson # 26

The Coordinate Plane

Date

Warmup

1.

-7 + 3 = ____

8 + 4 = ____

-2 + -9 = ____

4 + 7 =_____

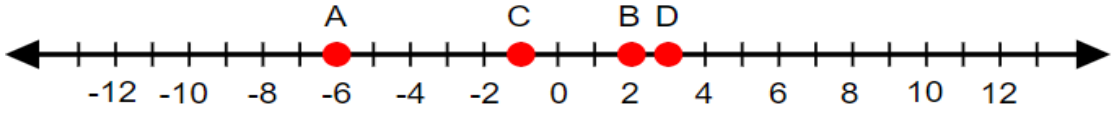
2. *Solve and Check*

$$\frac{p}{12} = 126$$

3. Evaluate the Expression when a=4, b=5, and c=7

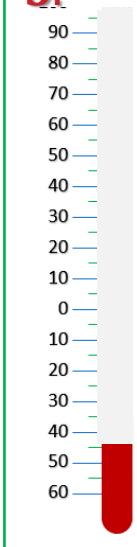
a(b + c) + 10

4.



A=____ B=____ C=____ D=____

5.

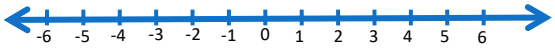


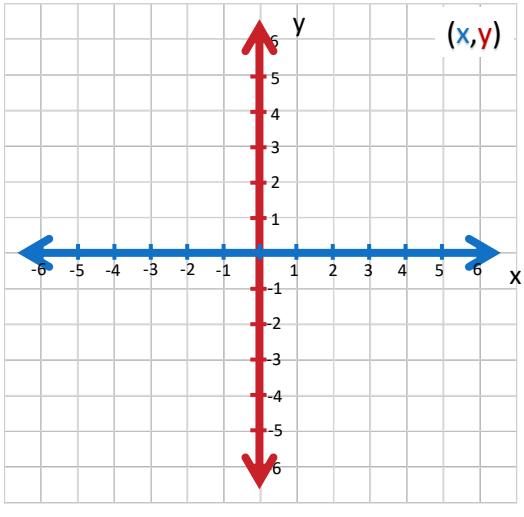
I. The Coordinate Plane

Coordinate Plane: A coordinate plane results from a vertical number line and a horizontal number line intersecting at their zeros

To make the Coordinate Plane, draw two numbers lines. The lines shall be perpendicular to each other, and intersect at the origin of both lines.

The horizontal line is called the x-axis.



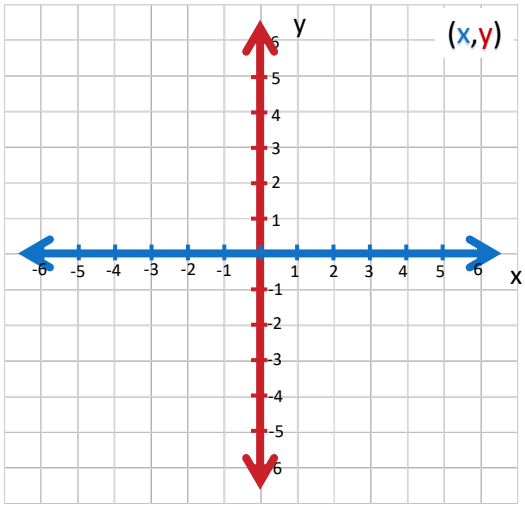


origin: The point of intersection for the x-axis and y-axis. Point (0,0)

Quadrants: Four sections are made by the intersecting lines of a coordinate plane. Name the top right Quadrant I, then going counter-clockwise name Quadrant II, III, and IV.

I. Graphing Ordered Pairs

Ordered Pair: A pair of numbers written in a specific order. On a coordinate plane an ordered pair (x,y) is used to identify the location of a point.



Graphing Points: Points on the Coordinate plane are identified by two values called an ordered pair. The ordered numbers refer to the (x-value, y-value)

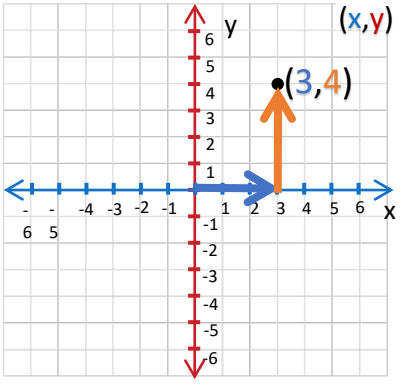
When plotting the point, first identify the location on the x- axis, then move up or down along the y-axis to find the correct location.

Graph the point (3,4)

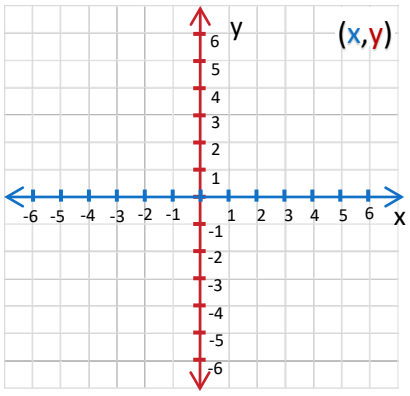
The x-value is 3. Start at the origin (0,0). Move right to the number 3 on the x-axis.

The y-value is 4. Start at (3,0) and move up 4 units on the y-axis.

Label the point with the ordered pair. (3,4)

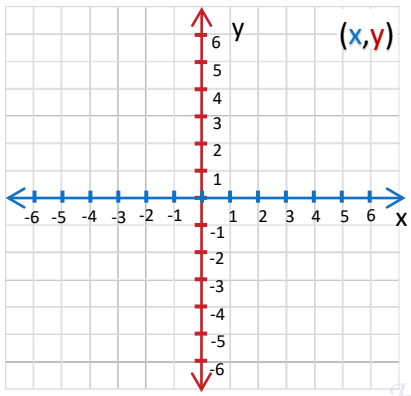


Plot the points



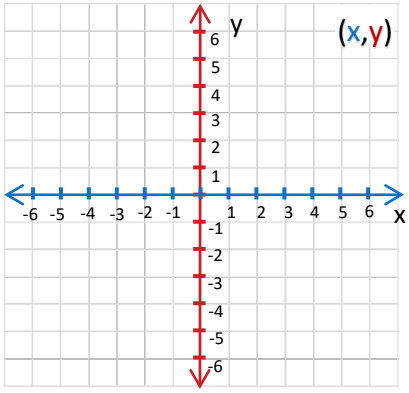
(-3,6)
(2,4)
(-4,-2)
(6,-3)

Plot the points



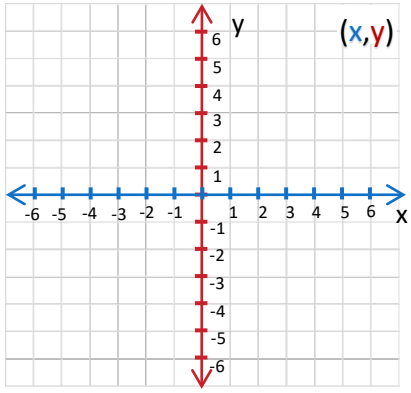
(5,0)
(-1,5)
(-4,-5)
(5,-1)

9. Plot the points



A(0,5)
B(-3,4)
C(-2,-4)
D(3,-5)

10. Plot the points

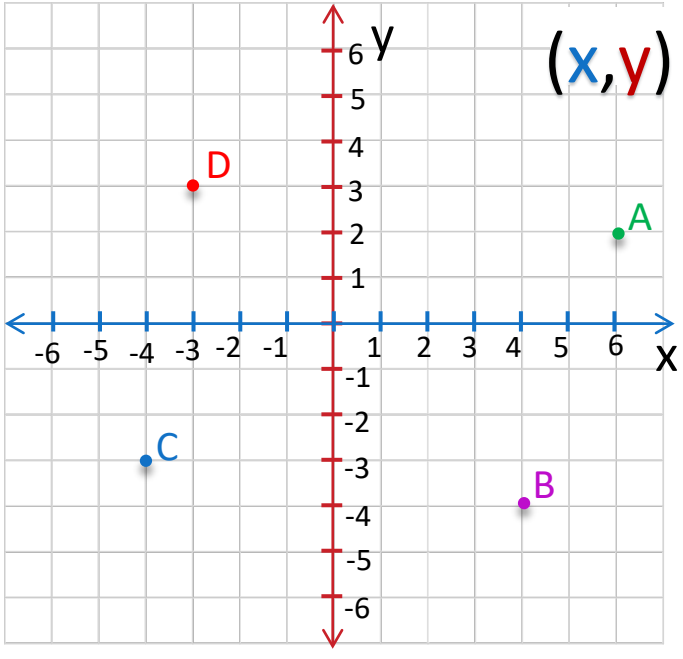


II. Naming Points with Ordered Pairs

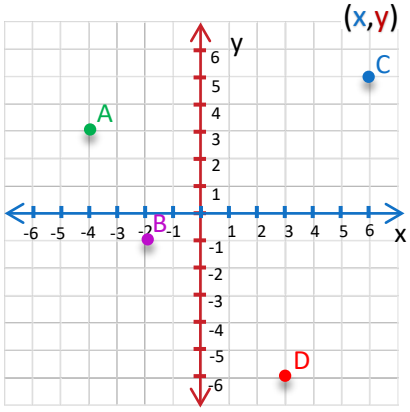
Naming Points: The name is written as an ordered pair.

(x-value, y-value)

When naming the point, first identify the location on the x-axis, then determine how far up or down the point is along the y-axis to determine the second value.

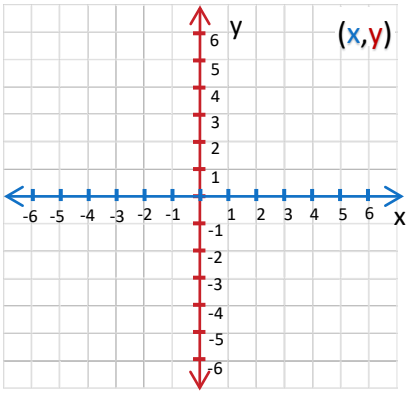


11. *Name the points*



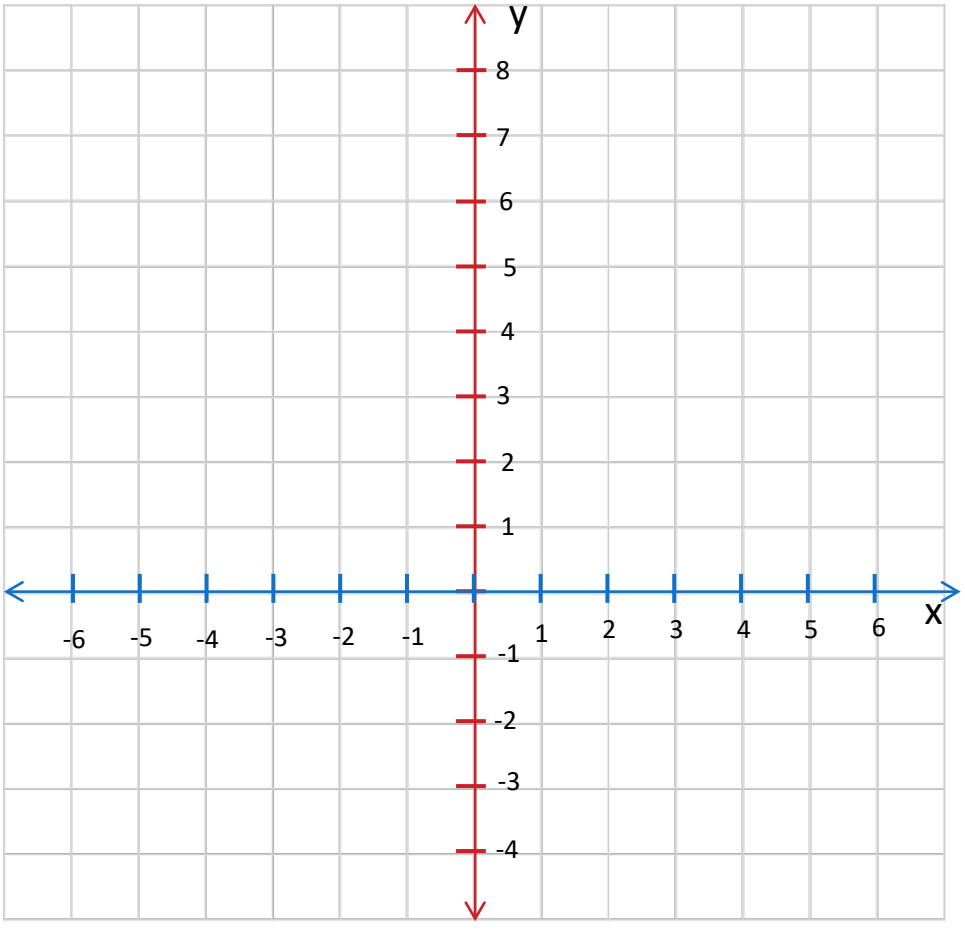
$A(\_, \_)$
$B(\_, \_)$
$C(\_, \_)$
$D(\_, \_)$

12. *Plot the points*



III. Drawing with Ordered Pairs on a Coordinate Plane

As you plot each point draw a segment connecting it to the previous point



1. (0,-1)
2. (0,8)
3. (-4,0)
4. (0,0)
5. (1,1)
6. (1,2)
7. (1,5)
8. (0,8)
9. (3,5)
10. (4,3)
11. (5,0)
12. (0,0)
13. (0,-1)
14. (-4,-1)
15. (-2,-3)
16. (3,-3)
17. (5,-1)
18. (0,-1)

What was drawn as a result of plotting the points? _____

Lesson # 27

Sequences

Date

Warmup

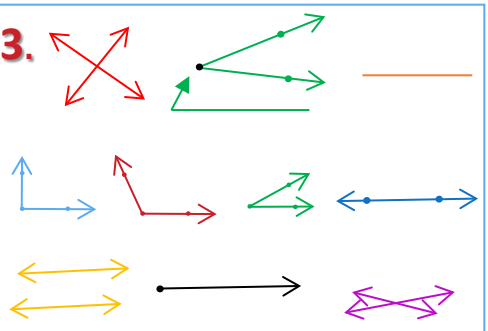
1.

$^{-}4 + {}^{-}2 =$ ____
$^{-}7 - {}^{-}5 =$ ____
$^{-}2 + 8 =$ ____
$^{-}9 - {}^{-}11 =$ ____

2. *Solve and Check*

$x + 2.5 = 8$

3.



4. What is the greatest common factor (GCF) of 28 and 35?

5. What are the multiples of 5 from 5 to 50?

I. Arithmetic Sequences

Grace's Book Store

Sequence: A sequence is an ordered list of numbers

3, 6, 9, 12, …

Term: Each number in a sequence is called a term

Arithmetic Sequence: A sequence in which each term is found by adding the same number to the previous term. (The number being added to calculate each term is called the "common difference")

5, 9, 13, 17, 21, …

The first term is: _____ The common difference is: _____

Write the next three terms in the sequence.

9,15,21,27, ____, ____, ____,…

Is it an arithmetic sequence?
- ○ Yes
- ○ No

The first term is: _____ The common difference is: _____

6. Write the next three terms in the sequence.

6, 14, 22, ____, ____, ____,…

Is it an arithmetic sequence?
- ○ Yes
- ○ No

7.

II. Geometric Sequences

Geometric Sequence: A sequence in which each term is found by multiplying the same number to the previous term. (The number being multiplied to calculate each term is called the "common ratio")

4, 8, 16, 32, 64, 128, …

The first term is: _____ The common ratio is: _____

Write the next three terms in the sequence.

6, 18, 54, ____, ____, ____,…

Is it a geometric sequence?
- ○ Yes
- ○ No

The first term is: _____ The common ratio is: _____

8. Write the next three terms in the sequence.

1, 4, 16, ____, ____, ____,…

Is it a geometric sequence?
- ○ Yes
- ○ No

9.

III. Other Sequences

1, 2, 6, 24, …

The sequence is
- ○ arithmetic
- ○ geometric
- ○ neither

The first term is: _____ The pattern is:_____

1, 1, 2, 3, 5, 8, …

The sequence is
- ○ arithmetic
- ○ geometric
- ○ neither

The first term is: _____ The pattern is:_____

10.

Lesson # 28

Prime Factorization

Date

Warmup

1. Determine if each is a prime or composite number:

5:_____

14:_____

7:_____

2.

$^{+}4 - {}^{-}8 =$

$^{+}4 + {}^{-}8 =$

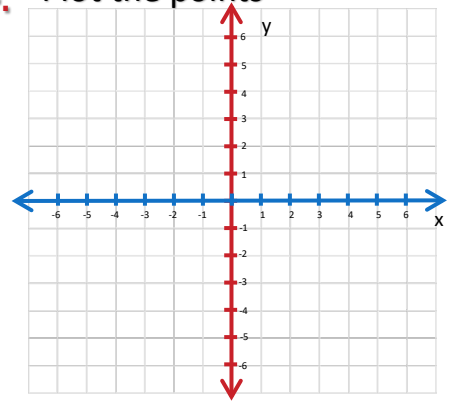
$^{-}4 - {}^{-}8 =$

$^{-}4 + {}^{-}8 =$

3. *Solve and Check*

$\frac{z}{1.5} = 12$

4. Plot the points



5. Write the next three terms in the sequence

12, 9, 6, _____, _____, _____

The sequence is ❑arithmetic ❑ geometric ❑ neither

The common difference is _____

The common difference in an arithmetic sequence can be a negative number

6. $2 \cdot 2 \cdot 2 \cdot 2$ in exponential form is _____

7. $2 \cdot 3 \cdot 2 \cdot 3 \cdot 2 \cdot 2 =$ ___ · ___

I. Prime Numbers

A prime number is a number that has _____, they are _____

A composite number is a number that has _____

_____

8. Circle **all** of the prime numbers.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,
15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25

II. Prime Factorization – Using Factor Trees

Prime Factorization:

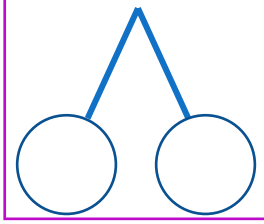
_____

_____

Write answers as a product of exponents

Use the factor tree to factor each number into a product of prime numbers.

10



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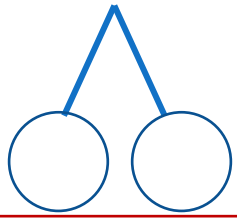
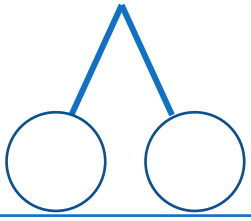


9. 77



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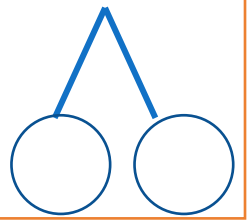

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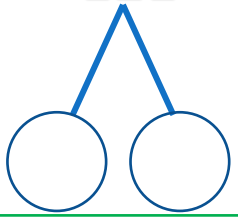
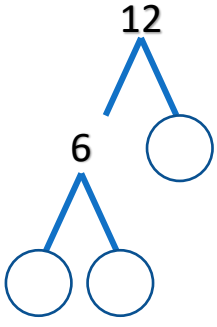


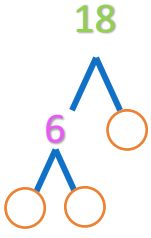


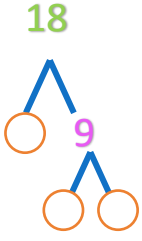
Often the first factors chosen are composite. Keep factoring composite numbers until you are left with all prime numbers.

Write the answer as a product of exponents

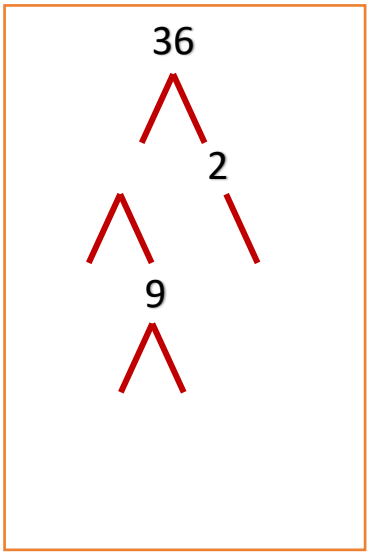
Prime Factorization (Tree Method):

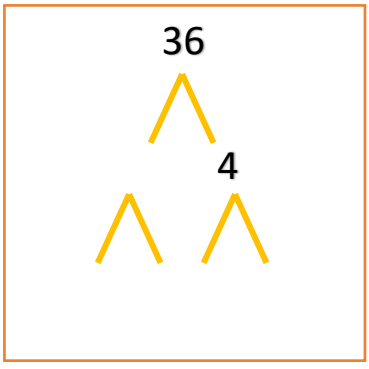
1. Choose any two factors of the number
2. Circle prime numbers
3. Continue factoring composite numbers
4. When all the numbers are prime, write the factors as a product of exponents.

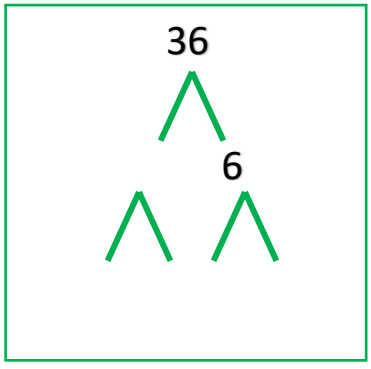


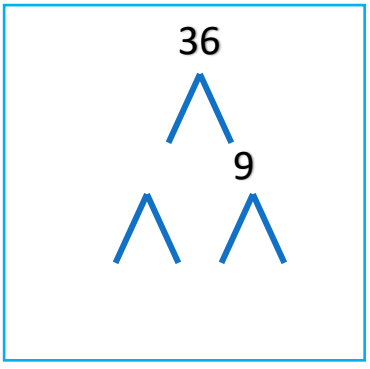


_____ · _____





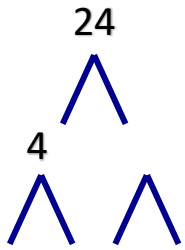




The prime factorization of 36 is _____ written with exponents is _____

The prime factorization will always be the same.
To check the answer, choose different starting factors.

12.



13.

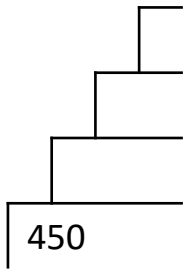
III. Prime Factorization – Using prime factor division

Divide only by Prime Numbers

Find the prime factorization of 36 using the division method.

Use Divisibility Tests

Prime Factorization (Division Method):



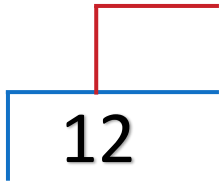
If it is an even number, divide by 2

If it ends in 0 or 5, divide by 5

If the sum of the digits are a multiple of 3, divide by 3

Wait until the end to determine if it is divisible by 7, 11, 13, and the larger prime numbers.

14.



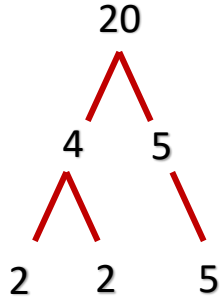
15.

IV. Factoring with Variables

Prime Factorization
(with Variables)

Factor 20pq

1. Factor the number
   $2 \cdot 2 \cdot 5$
2. Factor the Variable(s)
   $p \cdot q$



Factor $8x^2y^3$

16. Factor $10az$

17. Factor $6ab^2$

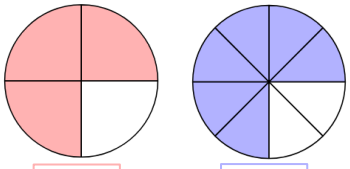
Lesson # 29

Equivalent Fractions

Date

Warmup

1. What fraction of the circles are shaded?



___ ___

2. Evaluate each expression for x = 3, y = 6, and z = -1

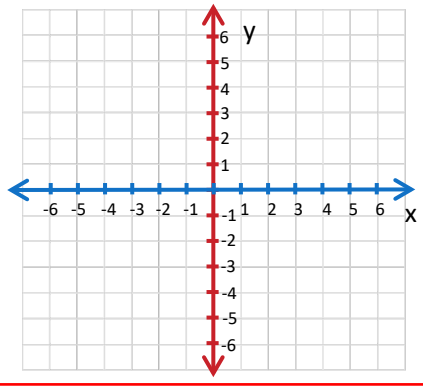
y+x y+z z-y x-y

3. *Solve and Check*

$3.4\,p = 5.1$

4. Plot the points

A:(5,−1),B:(2,4),C:(0,−3),D:(−4,−3)



5. Write the next three terms in the sequence

6, 60, 600, _____,

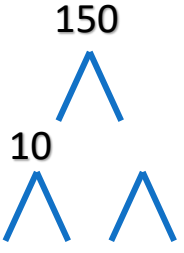
_____, _____

The sequence is

- ❑ arithmetic
- ❑ geometric
- ❑ Neither

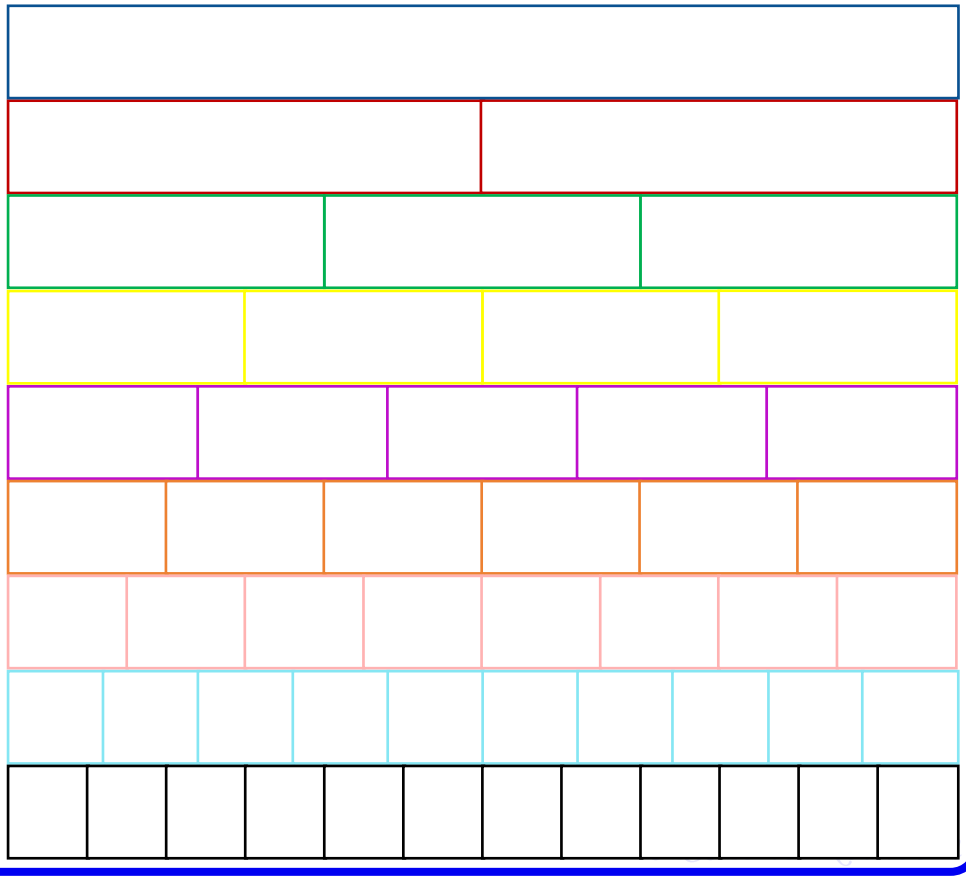
The common ratio is _____

6. What is the prime factorization of 150?

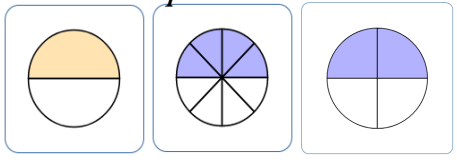


I. Fractions

Label the top and bottom of a fraction with their proper names.

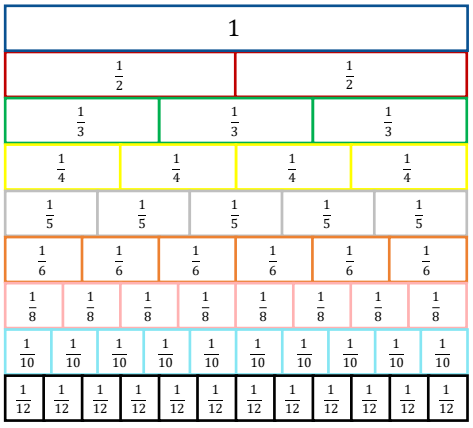


Identify each Fraction, then compare their values



Write 5 fractions equivalent with 1

$1 = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$



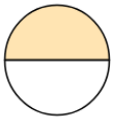
Fractions Equal to 1: A fraction is equal to one when the numerator = denominator.

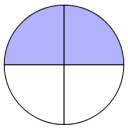
$$\frac{numerator}{denominator}$$

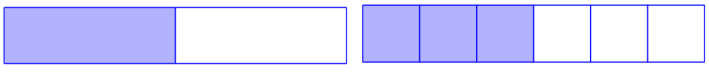
II. Equivalent Fractions

What number can we multiply by and not change the value?

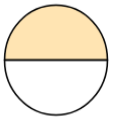
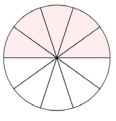
What property does this represent?

$\frac{1}{2} \cdot \frac{\quad}{\quad} = \frac{1}{2}$ 

$\frac{1}{2} \cdot \frac{2}{2} = \frac{\quad}{\quad}$ 



$\frac{1}{2} \cdot \frac{\quad}{\quad} = \frac{1}{2}$ $\quad \frac{1}{2} \cdot \frac{3}{3} = \frac{\quad}{\quad}$

$\frac{1}{2} \cdot \frac{\quad}{\quad} = \frac{1}{2}$ $\quad \frac{1}{2} \cdot \frac{5}{5} = \frac{\quad}{\quad}$

Find the missing numerator to make equal fractions.

$\frac{4}{5} \cdot \frac{\quad}{\quad} = \frac{\quad}{30}$

$\frac{2}{7} \cdot \frac{\quad}{\quad} = \frac{\quad}{42}$

11. $\frac{2}{3} = \frac{\quad}{30}$

12.

Find the missing denominator to make equal fractions.

$\frac{1}{8} \cdot \frac{4}{4} = \frac{4}{\quad}$

$\frac{3}{4} \cdot \frac{\quad}{\quad} = \frac{\quad}{20}$

13. $\frac{7}{9} = \frac{49}{\quad}$

14.

Equivalent Fractions: Fractions that are equal, or have the same value, are called equivalent fractions.

$\frac{1}{2} \cdot \frac{6}{6} = \frac{6}{12}$ Multiply the numerator and denominator of the fraction by the same number.

III. Reduce Fractions to Simplest Form

At a group pizza party Samantha asked for $\frac{4}{16}$ of a pizza. How much of the pizza did she want?

$\frac{4}{16} = \frac{2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \_\_$

The prime factorization of 4 is $2 \cdot 2$ and 16 is $2 \cdot 2 \cdot 2 \cdot 2$, the numerator must have a value, therefore use ___
The denominator is $2 \cdot 2 =$ _____

$\frac{4}{16} = \frac{4 \cdot 1}{4 \cdot 4} = \_\_$

The GCF (Greatest Common Factor) of 4 and 16 is 4.
Write the numerator as a product of the GCF and a factor ($4 \cdot 1 = 4$)
Write the denominator as a product of the GCF and a factor ($4 \cdot 4 = 16$)
$\frac{4}{4} = 1$ Cancel the fourths. The answer is _____

15. Find the GCF

Reduce using the GCF

$\frac{24}{40} = \_\_\_\_ = \_\_$

15. Reduce using the GCF

$\frac{12}{28} = \_\_\_\_ = \_\_$

Simplify the Fractions using prime factorization

$\frac{2}{4} = \frac{1 \cdot 2}{2 \cdot 2} = \frac{1}{2} \cdot \frac{2}{2}$

$\frac{5}{10} = \frac{1 \cdot 5}{2 \cdot 5} = \_\_$

$\frac{33}{60} = \_\_\_\_ = \_\_$

17. Simplify the fraction using prime factorization

$\frac{15}{150} =$

18. Write the fraction in simplest form

Fractions in Simplest : Fractions are called simplified when the GCF of the numerator and the denominator is 1.

$\frac{1}{2}$ and $\frac{9}{17}$ are both written in simplest form

Circle the fractions that are written in simplest form.

$\frac{2}{2}$ $\frac{3}{9}$ $\frac{23}{100}$ $\frac{7}{63}$ $\frac{200}{500}$

Lesson # 30

Order of Operations & Algebraic Expressions with Integers

Date

Warmup

1. Find the area of the rectangle with length= 3.5 meters and width = 2 meters using the formula $A = \ell w$

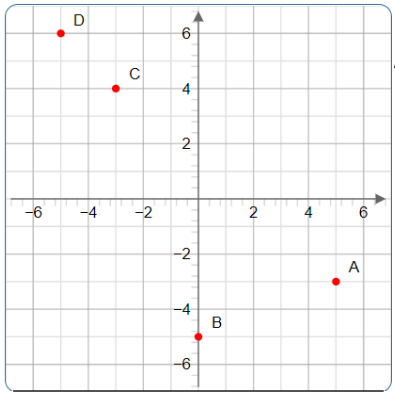
2. Evaluate each expression for x = -5, y = -2, and z = 8

x+z y-z x-z z-x

3. *Solve and Check*

$z + 8.75 = 11$

4. Give the (x,y) value of each point



A:_____

B:_____

C:_____

D:_____

5. Write $\frac{70}{105}$ in simplest form using prime factorization or the GCF

6. Fill in the missing values using the distributive property.

6 (2 + 3) = 6(__) + 6(__)

7. Write the order of operations.

I. Expand Algebraic Expressions using the Distributive Property

Simplify using the distributive property: 5(4) – 3(4) = (__ - __)(4)

Simplify using the distributive property:

5x – 3x

(____ - ____) x

_____ x

Simplify using the distributive property:

7 (x + 3) = 7(x) + 7(3)

Expand using the distributive property:

3 (y - 1)

Expand using the distributive property:

$5 (t - 8)$

Expand using the distributive property:

$4 (s + 6)$

8. Expand using the distributive property:

$9 (s + 4)$

9. Expand using the distributive property:

II. Simplify Algebraic Expressions using the Distributive Property

Simplify using the distributive property:

$7x - 9x$

Simplify using the distributive property:

$6y + 3y$

10. Simplify:

$2s + 5s$

11. Simplify:

$8w - 7w$

Simplifying Expressions :

Use the distributive property to add or subtract like-variables.

$2s + 5s = (2+5)\ s = 7s$

Simplify using the order of operations.

$2^3 - 20$ $(4 - 9) + 100$

Parentheses

Exponents

Multiplication or Division

Addition or Subtraction

III. Simplifying Expressions with Integers

Simplify:

$-2x + 8x$

Simplify:

$9y - 10y$

Simplify:

$-3z + -6z$

12. Simplify:

$9b - {}^{-}11b$

Simplify:

$3(2.5) - 10^2$

13. Evaluate the expression if c = 16

$2c + -10$

14. Evaluate the Expression:

$-5 + 6(7 + 8)$

Lesson # 31

Statistics: Mean, Median, Mode, and Range

Date

Warmup

1. Divide 23.94 ÷ 0.6

2. *Solve and Check*

$y - 8.3 = 16.6$

3. The test scores for a class are: 88, 88, 68, 76, 76, 64, 100, 84, 80, 72, 80, 88, 80, 96, 88, 76, 68, 96, 92, and 80.

Grade	Tally	Frequency
91-100		
81-90		
71-80		
61-70		

How many students have a grade between 81-90? _____

The teacher requires all students who score a 70 or less to attend extra help. How many students are required to attend extra help?_____

How many students are in the class?_____

What is the range of grades? _____

I. Mean: The Average of the Data

Mean: Mean is another word for average. To calculate the mean divide the sum of the data by the number of members in the data set.

Find the mean of 4, 6, 2, 5, 5

4 + 6 + 2 + 5 + 5 = 22

There are 5 members

22 ÷ 5 = 4.4 The mean is 4.4

Find the mean of the grades for the students in Warmup #3

4. Find the mean age of the youth in choir. The ages are 15, 12, 14, 16, 13, 14, 15, 13 , 14, and 15. Round the mean to the nearest whole number.

5.

II. Mode: The number or numbers that occur the most

Mode: Mode refers to the number or numbers that occurs most often. To determine the mode write the numbers in numerical order, then determine the number or numbers that occur the most often.

Find the mode of 4, 6, 2, 5, 5

2, 4, 5, 5, 6 5 occurs the most often.

The mode is 5.

Find the mode of the grades for the students in Warmup #3

6. Find the mode of the youth age in choir. The ages are 15, 12, 14, 16, 13, 14, 15, 13 , 14, 15

7.

8.

When multiple numbers occur the most, there will be more than one mode.

III. Median

Median: The median is the middle number when the data is written in order from the least to greatest. When there are two middle numbers, the median is the average of the two numbers.

Find the median of 4, 6, 2, 5, 5
2, 4, 5, 5, 6
The middle number is 5.
The median is 5.

Find the median of 1, 4, 6, 3
1, 3, 4, 6
The middle numbers are 3 and 4
The median is 3.5.

Find the median of the grades for the students in Warmup #3

64, 68, 68, 72, 76, 76, 76, 80, 80, 80, 80, 84, 88, 88, 88, 88, 92, 96, 96, 100

9. Find the median of the youth age in choir.
The ages are 15, 12, 14, 16, 13, 14, 15, 13 , 14, 15

10. Find the median grade when the class grades are 100, 98, 78, 92, 91, 96, and 86.

Measures of Central Tendency: The mean, median, and mode are three ways to describe the "center point" of the data set. Depending on how the data is being used, one method may be better.

11. The 16 students in Jana's math group were told to conduct a survey, then calculate the mean (rounded to 0 decimal places), median, and mode of the data. The group decided to find the average of their last test grade. The data set is 70, 100, 70, 100, 60, 70, 30, 70, 90, 40, 80, 50, 100, 80, 30, 30.

1. Put the numbers in numerical order

2. Determine the mode(s) _____

3. Determine the median _____

4. Calculate the mean

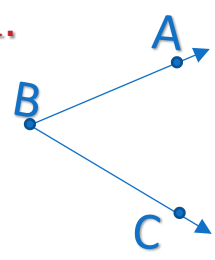
Lesson # 32

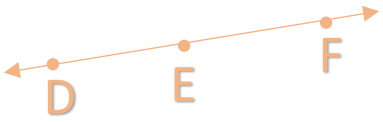
Angle Relationships

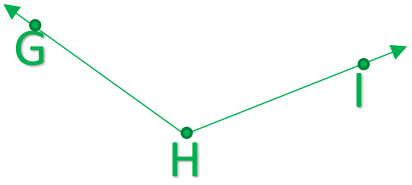
Date

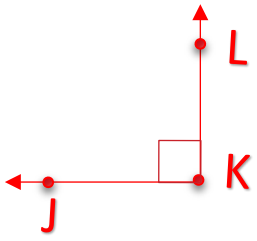
Warmup

1. Identify and classify each angle









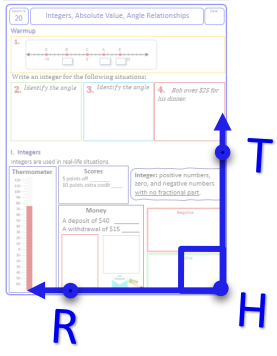
Solve and Check

2. $z + 14 = 90$

3. $x - 30 = 100$

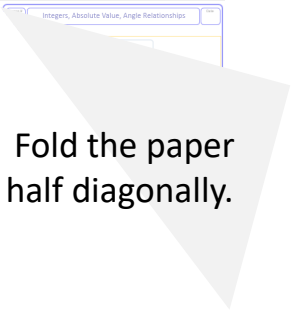
I. Complementary Angles

Complementary Angles:
Two angles are complementary if the sum of their measures equals 90°

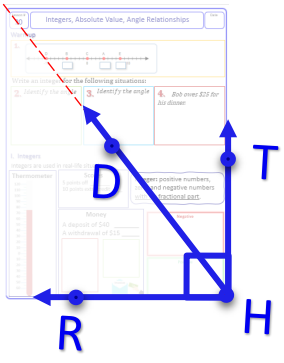


1. Look at the corner of your notes page. It is a right angle

$< RHT$ *is a right angle*

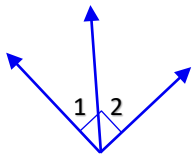


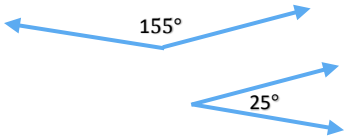
2. Fold the paper in half diagonally.



3. The crease in the paper divided the right angle into two angles. The sum of these two angles = 90°

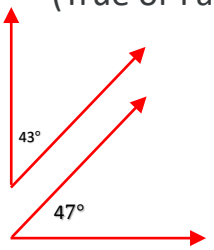
Determine if each pair of angles is complementary





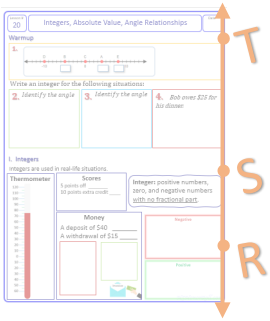
4. Two angles are complementary angle if the _____ of the angles equals _____ degrees.

5. The pair of angles is complementary. (True or False)



I. Supplementary Angles

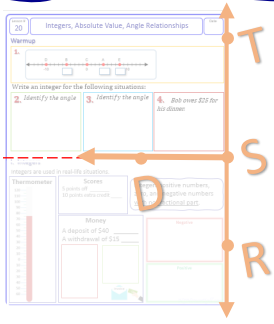
Supplementary Angles:
Two angles are supplementary if the sum of their measures equals 180°



1. Look at the side of your notes page. It is a straight angle

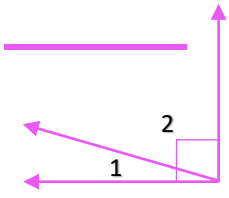
$< RST$ *is a straight angle*

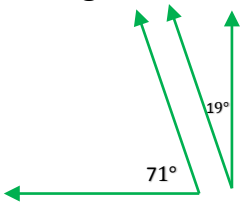
2. Fold the paper in half by bringing the bottom of the page to the top of the page.

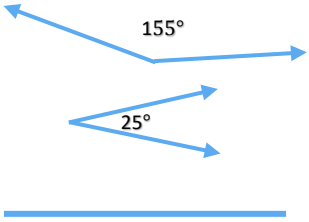


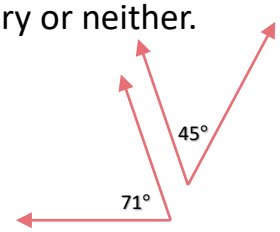
3. The crease in the paper divided the right angle into two angles. The sum of these two angles = 180°

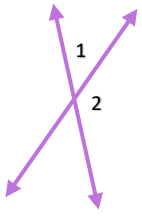
Classify each pair of angles as complementary, supplementary or neither.



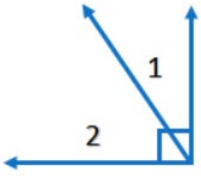




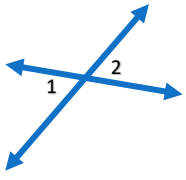




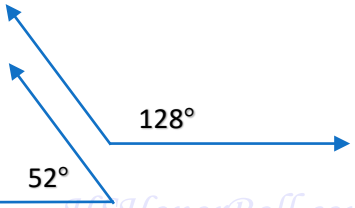
6. Classify each pair of angles as complementary, supplementary or neither. (Circle the answer)



7. Classify each pair of angles as complementary, supplementary or neither. (Circle the answer)

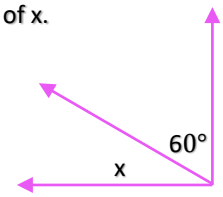


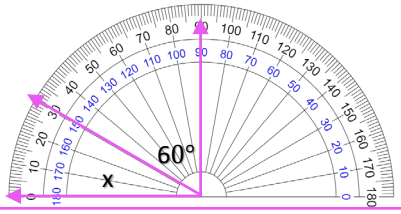
8. Classify each pair of angles as complementary, supplementary or neither. (Circle the answer)



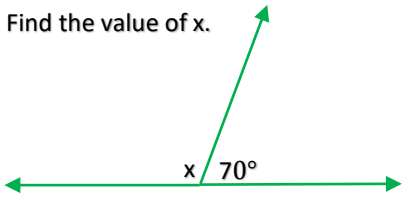
III. Find Missing Angle Measures

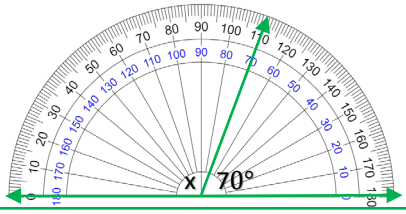
Find the value of x.



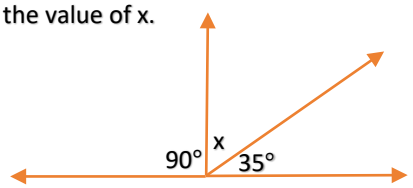


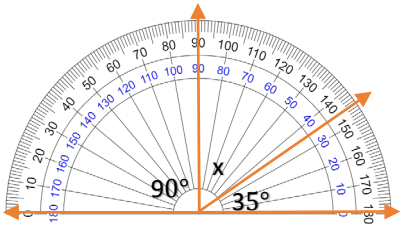
Find the value of x.



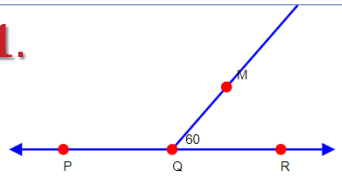


Find the value of x.



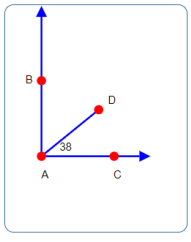


11.



Find the measure of ∠PQM, given ∠MQR = 60°.

12. Find the measure of ∠BAD, given ∠DAC = 38°.



13. Two angles are supplementary. One angle = 81°. What is the measure of the other angle?

The sum of the two angles measures _____°.

The angles measure 81° and _____°.

14. Two angles are complementary. One angle = 36°. What is the measure of the other angle?

The angles measure 36° and _____°.

15. Draw the intersecting lines shown on the computer.

A. What is the relationship between <AED and <AEB? _____

B. What is the measure of <AEB? _____°

C. What is the relationship between <AED and <DEC? _____

D. What is the measure of <DEC? _____°

E. What is the relationship between <AEB and <DEC? _____