

Holy Child Jesus Catholic Academy
Incoming 7th graders- Summer Work 2023

Dear Incoming 7th graders,

Attached you will find your summer packet for Mathematics to brush up on your skills and prepare you for the work ahead in th grade. The packet is broken up into 9 weeks- with 5 questions per week.

Take your time and show ALL work. Use the space provided on each page to show work and if you use extra scrap paper, please attach it to the final packet. All final answers should be boxed or circled.

All math packets will be collected on the first day of school in September to be graded.

I hope you have a wonderful summer and I look forward to our Math journey together in September!


I $\{\sqrt{\heartsuit}\}^2$
MATH

Sincerely,
Mrs. Beaudry



Incoming
7th Grade

Summer Math
Calendar



Week One

Problem

Work & Answer

In a bouquet of 24 roses, sixteen are red and the rest are pink. What is the ratio of pink to red roses?

Find each quotient

- a.) $6,728 \div 16$
- b.) $18,931 \div 83$

How many faces, vertices and edges are on a box?



Evaluate each expression if $a = 2$, $b = 3$ and $c = 4$.

- a.) $2a + 4b - c$
- b.) $6(a + c) - b$

Jimmy can run 3.5 miles in 20 minutes. How far can he run in one hour and ten minutes?

Week Two

Problem

Work & Answer

A season pass to the local waterpark costs \$84. If you go to the park ten times during the season, what is the unit rate of cost per visit?

Find the LCM of the following:

- a.) 3 and 8
- b.) 9 and 12
- c.) 4 and 6

Find each product:

- a.) 13.08×0.7
- b.) 1.14×0.86

On Thursday the high temperature was 0°C . If it was three degrees colder on Friday, what was the temperature?

Right before a snow storm the hardware store sold fifteen shovels in sixty minutes. At that rate the store sold a shovel every _____ minutes.

Week Three

Problem

Work & Answer

Find the GCF of the following:

- a.) 18 and 24
- b.) 12 and 36
- c.) 32 and 96

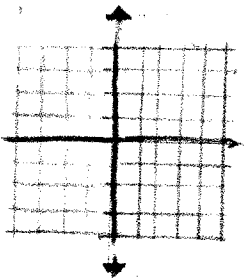
Phoebe needs to use $\frac{3}{4}$ cups of sugar to make one batch of cookies. How many batches can she make with 12 cups of sugar?

Which is colder -3° or -13° ? How much colder is that degree?

Graph the ordered pairs.

- $(-3, -1)$
- $(1, -1)$
- $(1, 5)$

Connect the points in the previous problem. Then find the area of the given figure.



Week Four

Problem

Work & Answer

Find the value of the following:

- a.) 2^4
- b.) 4^3
- c.) 6^2

Study the data table which shows the number of laps each student ran during the warm up for gym class, then find the mean number of laps.

Student	Jack	Julie	Ben	Beatrice	Carl
# of laps	4	7	6	5	8

Find the absolute value of each:

- a.) -8
- b.) 8

Write and solve an inequality that means a number plus four is greater than or equal to twelve.

A box of twelve granola bars was \$3.60. What was the unit cost per bar?

Week Five

Problem

Work & Answer

Evaluate each expression

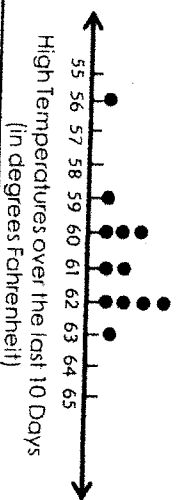
a.) $16 + 3^2 \times 2$

b.) $2^3 \div 4 + 12$

Find the prime factorization of each:

a.) 16 b.) 72

Using the data plot in the next space, what is the outlier of the data shown?

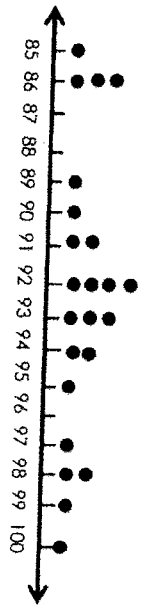


Solve for each variable.

a.) $m - 64 = 7$ b.) $3r + 2 = 35$

An aquarium's dimensions are $3\frac{1}{4}$ ft x 2ft x $1\frac{3}{4}$ ft.
What is the volume of the aquarium?

Week Six

Problem	Work & Answer
<p>Circle the letter of the survey question that will yield more results. Explain why you choose that question.</p> <p>List three solutions for the inequality $x \leq 3$ and give three numbers that are not solutions.</p>	<p>a.) What country does each participant live in? b.) What town or city does each participant live in?</p> <p>Solutions: _____ Not Solutions: _____</p>
<p>Circle the expression equivalent to $9x + 36$.</p>	<p>a.) $3(x + 9)$ b.) $9(x + 4)$</p>
<p>Find the mean, median and mode of the below test scores:</p> 	<p>a.) What is the opposite of -7? b.) How many units are -7 and its opposite from zero?</p>

Week Seven

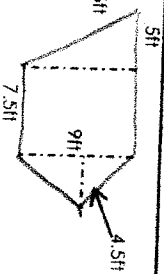
Problem

Work & Answer

Which expression is equivalent to $56x - 28y + 42z$?

- a.) $8(7x - 3y + 6)$ b.) $7(8x + 4y + 6z)$
 c.) $7(8x - 4y + 6)$

Find the area of the figure.



Add or subtract.

- a.) $523.74 + 319.281$
 b.) $120.16 + 38.094$
 c.) $604.11 - 57.989$

Anna bought a sweater at 40% off the original price. If she paid \$12, what was the original price of the sweater?

The area of the garden was $2\frac{2}{5} \text{ yd}^2$. If the length is $1\frac{1}{2} \text{ yd}$, find the width.

Week Eight

Problem

Work & Answer

Find each quotient. Simplify your answer.

a.) $\frac{5}{8} \div \frac{1}{4}$ b.) $3 \frac{1}{6} \div \frac{2}{3}$

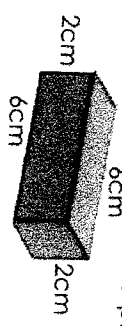
What are 3 values of x that will make the inequality true?

$$3x + 9 \leq 30$$

Simplify the expression by using the distributive property and combining like terms.

$$6(3y + 7) + 4(9 + 9y)$$

Draw a net to represent the rectangular prism below. Then give the surface area of the prism.



Anna buys 5lbs of pecans for \$19. At this unit rate, find the cost of each amount in the table.

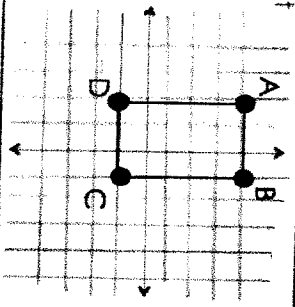
Pecans (pounds)	Total Cost
$\frac{1}{2}$	
3	
5	\$19.00

Week Nine

Problem

Work & Answer

Write the coordinate pair for each point on the coordinate plane.



Find the area and perimeter of the shape above.

Find each product or quotient.

- a.) $5.4 \div 0.3$
- b.) 8.7×3.9

The area of the school garden is $31\frac{1}{4}$ ft. If the width is $6\frac{3}{5}$ ft, find the length.

Find the surface area of triangular pyramid using the net.

