Name_____

Summer work: Incoming 8th Graders

Complete the multiplication and division chart.

You must show your work.

MULTİPLİCATİON CHART

	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Name : _____

Division Table

	÷ 1	÷ 2	÷ 3	÷ 4	÷ 5	÷ 6	÷ 7	÷ 8	÷ 9	÷ 10	÷ 11	÷ 12
= 1												
= 2												
= 3												
= 4												
= 5												
= 6												
= 7												
= 8												
= 9												
= 10												
= 11												
= 12												

Greatest Common Factor

Find the Greatest Common Factor using a prime factor tree

GCF of 96 and 48

GCF of 60 and 44

Alice and Bob are organizing a charity event. They have two types of gift bags to prepare: small gift bags and large gift bags.

- Alice can prepare 24 small gift bags in a set, and Bob can prepare 36 large gift bags in a set.
- They want to make sure that all the gift bags they prepare have the same number of items, with no leftover items.

What is the greatest number of items that Alice and Bob can put in each gift bag, ensuring that both the small and large gift bags have an equal number of items?

Least Common Multiple/Least Common Denominator

LCM 9 and 21

LCM 15 and 20

Sarah and Tom are organizing a charity event, and they need to set up tables for different activities. Sarah sets up a table every 8 minutes, and Tom sets up a table every 12 minutes. If they both start setting up their tables at the same time, after how many minutes will they both set up a table at the same time again?

Multiplication and Division

$$\begin{array}{r} 7.91 \\ \times\, 0.19 \\ \hline \end{array} \qquad \begin{array}{r} 26.3 \\ \times\ \ 7.8 \\ \hline \end{array} \qquad \begin{array}{r} 3.07 \\ \times\ \ 19 \\ \hline \end{array} \qquad \begin{array}{r} 63.2 \\ \times\ \ 8.5 \\ \hline \end{array} \qquad \begin{array}{r} 0.394 \\ \times\ \ 70 \\ \hline \end{array}$$

$$86\overline{)10535} \qquad 27\overline{)33115} \qquad 43\overline{)85831}$$

Integers and Rational Numbers

1. -3 + (-1) =	2. -2 + 9 =
3. 4 + (-7) =	4. -8 + (-5) =

1. $\left(-2\frac{2}{7}\right) - 2\frac{1}{4} =$

2. $\left(-4\frac{3}{4}\right) - \left(-5\frac{4}{11}\right) =$

Equations and Inequalities

Sarah is organizing a charity event and needs to order some gift bags. Each gift bag costs $5, and there is also a $30 delivery fee for the total order. Sarah has a budget of $150.

Write and solve an equation to determine how many gift bags she can order.

Sarah is planning a party and wants to buy balloons for the event. Each balloon costs $2. She has a budget of $50 for decorations. Write and solve an inequality to represent how many balloons Sarah can buy without exceeding her budget.

Percents and rate of change

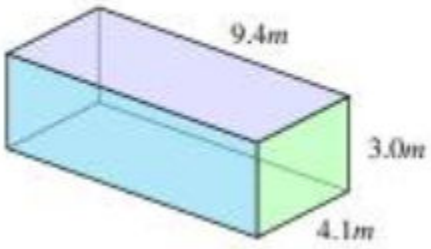
1. What is 93% of 600?
2. What percent of 825 is 627?
3. 6 is 15% of what amount?
4. 368 is 64% of what amount?

A car is traveling on a highway. The car travels 120 miles in 3 hours. What is the rate of change of the car's speed in miles per hour?

Geometry

A circular garden has a radius of 7 meters. You want to lay down a layer of mulch to cover the entire surface of the garden. How much mulch is needed to cover the garden?

Identify the shape below, find the lateral surface area, total surface area and volume.



Shape: _____

Lateral surface area: _____

Total surface area; _____

Volume:_____

Statistics and Probability

Find the mean, median, mode and range of the data sets below

1) $\{83, 73, 83, 59, 24\}$

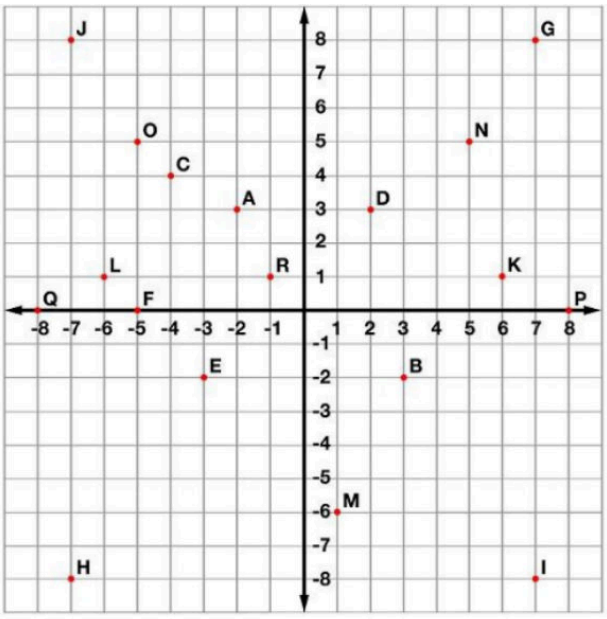
Mean:
Median:
Mode:
Range:

2) $\{59, 19, 35, 35, 35\}$

Mean:
Median:
Mode:
Range:

A bag contains 5 red balls, 3 blue balls, and 2 green balls. One ball is randomly drawn from the bag. What is the probability that the ball drawn is:

1. **Red**
2. **Blue**
3. **Green**



Tell what point is located at each ordered pair.

1. (3, -2) _____
2. (2, 3) _____
3. (-5, 5) _____
4. (-7, -8) _____
5. (-7, -8) _____
6. (-5, 0) _____

Write the ordered pair for each given point.

7. E _____
8. M _____
9. P _____
10. G _____
11. Q _____
12. M _____

Student Reflection/Evaluation

1. On a scale of 1-10, 1 being the easiest, 10 being the hardest, how would you rate this packet?

2. What types of problems did you find the most difficult and why?

3. What types of problems did you find the easiest and why?

4. How long did it take you to complete the summer packet and how did you space it out (daily, weekly, all at once?)

5. List three goals for math this upcoming school year and how do you plan to accomplish those goals?
   1.

   2.

   3.

Parent Evaluation/Reflection

1. On a scale of 1-10, 1 being the easiest and 10 being the hardest, how difficult did you find this summer packet for your student?

2. On a scale of 1-10, 1 being no help and 10 being helped with almost every problem, how much help did you give your student with this summer packet?

3. What would you say was the most difficult part of the summer packet?

Student Name: _____

Parent/Guardian(s) names: _____

Parent/Guardian(s) emails: _____

Parent/Guardian(s) phone numbers: _____

Student and Parent/Guardian Declaration

I have completed the summer packet to the best of my ability and will turn it in by the last day of the first week of school.

_____ _____

Student Signature Parent Signature