GRADE 5: UNIT 5 5.NBT. 1,2,4,7 5.OA.1,2,3 5.G.1,2 Test: February 21-23, 2018

February 6-8, 2019 5.NBT.1, 5. NBT.2= SCIENTIFIC NOTATION

February 6, 2019 ENGAGEMENT

Give an instance where it would be advantageous for you to divide quickly by moving decimals rather than using long division.

GROUP QUESTION:

Everyone loves YouTube, right? Well, this company's file contains approximately three billion videos. How many millions is that? (Hint: use place value, then scientific notation and move the decimal to get the answer)

Exit Slip: (5.NBT.2)

What is the equivalent to multiplying a number by 10^5?

a. Adding 10 five times
b. Adding 5 ten times
c. Multiplying by 10 five times
d. Multiplying by 5 ten times

February 7, 2019 Engagement

Number Talk - Two students evaluated the following expression and got two different answers: 20÷2(5+5). Share and discuss how they could have gotten different solutions. Listen and look for students who analyze and reason about how to evaluate the expression. What similarities are there to the order of operations?

Group Question: PBT Contig

Exit Slip: Solve: 8.4×10^4

February 8, 2019 Engagement

Using all of the digits 9, 8,7,6,5,4 and at least two operations (i.e. +, -, x, ÷) what equations could you make that are true? Students may draw a model, etc. to explain their solutions.

Group Question: Contig PBT

Exit Slip: Solve: 7x + 5 = ? when x= 6

FEBRUARY 11-15, 2019 5.NBT. 4= PLACE VALUE OF DECIMALS

February 11, 2019 ENGAGEMENT

When would you use place value in real life? Why is it important?

GROUP QUESTION:

Remember that Thor ate 1.432 pounds of strawberries and Carter ate 1.447 pounds of strawberries. Which choice represents the amount of strawberries Carter and Thor ate, rounded to the nearest hundred? (SHOW YOUR WORK USING PLACE VALUE!!!!) Explain place value.

1.34 and 1.44

1.44 and 1.45

1.43 and 1.45

1.43 and 1.44

EXIT SLIP:

Thor is tired of strawberries and decides to eat blueberries instead. Carter doesn't care as long as it isn't lima beans because he hates them.

Thor eats 0.076 pounds and Carter eats 1.102 pounds. Round to the nearest hundredth and tell which two numbers represents the correct answer.

Who ate more blueberries and by how much?

February 12, 2019 Engagement

enVision math 2.0 p. 735 (pearsonrealize.com) Solve and Share Activity

Group Question: Money from Chores PBT

Exit Slip: Round to the nearest thousandth and then write an inequality 2.3456 and 2.3657

February 13, 2019 Engagement

enVision math 2.0 p. 747 (pearsonrealize.com) Solve and Share Activity

Group Question: Money from Chores PBT

Exit Slip: Split between six friends: $94.96

February 14, 2019 Engagement

enVision math 2.0 p. 777 (pearsonrealize.com) Solve and Share Activity

Group Question: Money from Chores PBT

Exit Slip: Compare decimals

8.9234 and 8.9324 with an inequality

February 15, 2019 Engagement

Math Talk- Tell me all you can about coordinate grids. What are they used for? What do they represent? How are they used in real life applications?

Group Question: Money from Chores PBT

Exit Slip: Solve for n when n = 8

87 – n =?

FEBRUARY 18-22, 2019 5.NBT.7 MULTIPLY AND DIVIDE DECIMALS

February 19, 2019 ENGAGEMENT

How would someone's life be impacted negatively if they never learned to divide decimals?

GROUP QUESTION: Thor and Carter decide to go shopping. Because they are just little dogs, they do not have to pay tax. (how is that fair??) Thor wants to buy a new bed because his is ragged out from Carter trying to bury his toys in there. Carter wants to buy anything, because he doesn't get out much. Thor chooses a bed for $32.51. Carter chooses a pillow for $20.41. Thor holds the money for the both of them and gives the cashier $100.00. How much change should Thor receive back? (He learned his math because he knew the humans would try to trick him...) What did you do and why?

EXIT SLIP: Thor bought 6.7 pounds of cinnamon teddy grahams (his favorite). He wants to divide them into 7 bags, one for each day of the week. How much will be in each bag?

February 20, 2019 Engagement

enVision math 2.0 p. 813 (pearsonrealize.com) Solve and Share Activity

Group Question: Sidewalk Patterns

Exit Slip:

9 friends share a dinner bill of $187.98. Approximately how much does each friend pay?

FEBRUARY 25-March 1, 2019 5.OA.1 ALGEBRAIC EXPRESSIONS

February 27, 2019 ENGAGEMENT

Why would someone need to substitute a letter for a number in a math expression?

GROUP QUESTION:

Evaluate the expression for: b= 8 $24 + b - 2 \times b$

Evaluate the expression for: b= 10

Evaluate the expression for: b= 2

Evaluate the expression for: b= 4

Evaluate the expression (using PEMDAS): $24 + [(8-2) \times 8]$

EXIT SLIP:

Find the value of the expression: $46-9 + (8 \times 3)$

February 28, 2019 ENGAGEMENT

Number Talk - Looking at the sequence below: 4, 7, 10, 13, 16, 19, 22, 25 What do you notice about this pattern? How would you continue this pattern? How can you model this pattern?

Group Question: Sarah's Stone Wall

Exit Slip: Solve for y when y=9 for $54 + [(8-1) \times 3]$

March 1, 2019 ENGAGEMENT

Have students number their paper 1-4 . oFlash each pattern below for 10 seconds oHave the students determine whether the pattern is adding or subtracting a given number: 2, 4, 6, 8, answer add 2 3, 6, 9, 12 , add 3 30, 25, 20,15, subtract 5 6, 12, 18, 24, add 6

GROUP QUESTION:

Select ALL of the letter choices that correctly answer the questions below. SHOW YOUR WORK!!! Which 2 equations will produce the same answer? How does PEMDAS work?

A. $2 \times 5 + 3 \times 2 + 4$

B. $2 \times (5 + 3 \times 2 + 4)$

C. $2 \times 5 + 3 \times (2 + 4)$

D. $2 \times (5 + 3) \times 2 + 4$

E. $(2 \times 5) + (3 \times 2) + 4$

F. $2 \times (5 + 3) \times (2 + 4)$

EXIT SLIP:

Match the statement in column A to the correct expression in column B

Column A	Column B
fifteen times the sum of twenty three and twelve	(56 + 101) - 94
Sixty eight times the sum of thirty two and sixteen	48 ÷ 12 -18
Ninety four less than the sum of fifty six and one hundred one	15 x (23 + 12)
Eighteen less than the quotient of forty eight divided by twelve	68 x (32 + 16)

Task performance **5.OA.3 GRAPHING AND EQUATIONS**

Charmaine bought 4 movie tickets for a total of $28. Annaleise bought 5 movie tickets for a total of $30. Create a table to show the pattern of the process of the movie tickets for Charmaine and Annaleise. Explain why patterns are important.

Charmaine:

Tickets	Cost

Annaleise:

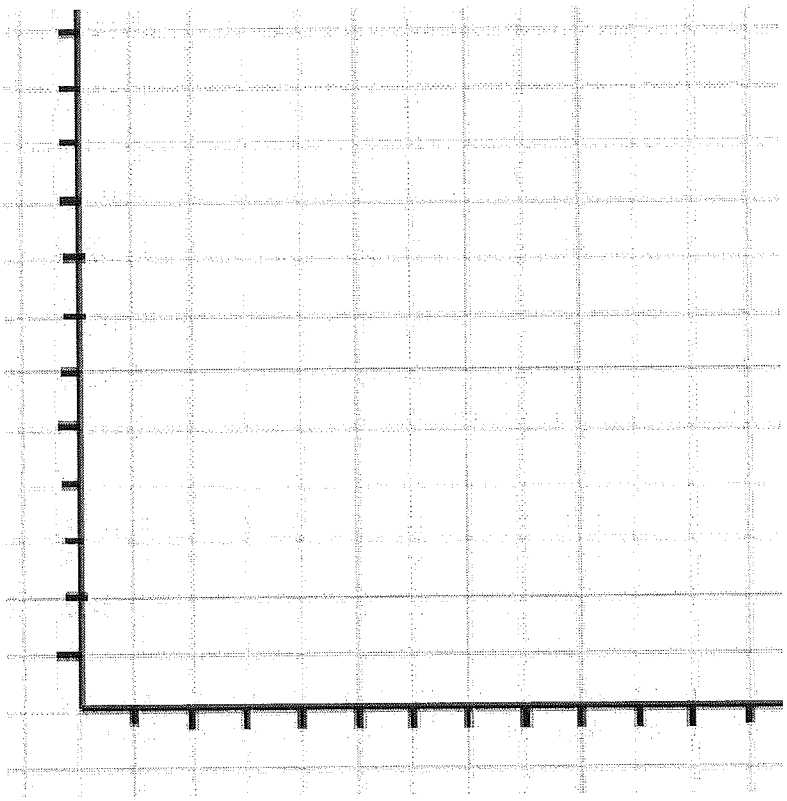
Tickets	Cost

Thor bought 6 movie tickets for a total of $36. Carter bought 8 movie tickets for $56. Create a table to show the pattern of the process of the movie tickets for Thor and Carter. Which ticket price is cheaper per person (puppy)?

TASK PERFORMANCE **5.G.1** **COORDINATE PLANES**

In what profession would someone use a coordinate grid? Why?

Use both Charmaine/Annaleise's tables or Thor and Carter's table to plot the graph for the cost of tickets on the coordinate plane below. Use a key with symbols. Explain graphing and why it is important to graph correctly, what happens when you don't and how could that affect businesses or professions.

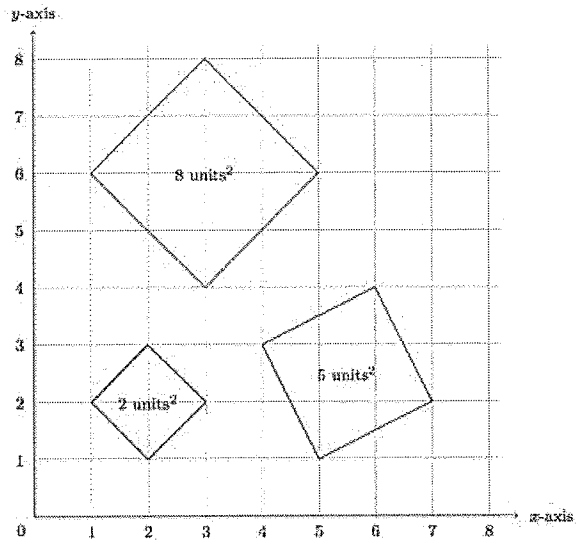


What patterns do you see on the graph? Explain.

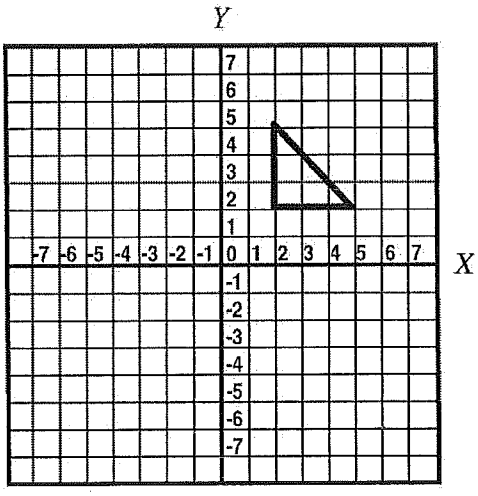
TASK PERFORMANCE **5.G.2** **COORDINATE PLANES**

When would a person use a coordinate grid in real life? Why?

(The large square is A, the little square is B, the medium square is C)



List the order pairs of the shapes. Then list an ordered pair to represent (any) point inside quadrilateral A, B, and C. Explain.



List the ordered pairs that create the right triangle. Then list an ordered pair to represent a point inside the triangle.

TASK PERFORMANCE **5.OA.B.3** **Algebraic Equations**

How does finding a rule or pattern help someone in life?

Two rules for creating number patterns are given below. Each rule begins with a number called the input and creates a number called the output.

Rule 1:

Multiply the input by 3. Then add 4 to the results to get the output.

Rule 2:

Multiply the input by 2. Then add 7 to the results to get the output.

	INPUT	OUTPUT
A.	3	13
B.	4	16
C.	5	19
D.	6	22

Solve: Fill in the blanks with the question mark. What is the rule?

INPUT	OUTPUT
2	6
4	?
6	18
?	24

"Contig": a game to practice and sharpen skills and facts in the four fundamental operations

FRANK W. BROADBENT

Syracuse University, Syracuse, New York

"Contig" is a game that intermediate-grade children love to play and with which they can challenge their older brothers, sisters, or parents. Four things are required —three dice, a score pad, markers, and a Contig board. The dice, pad, and markers are readily available, and a supply of boards can be made by reproducing the sample provided at the end of this article on sheets of paper.

Rules of the Game

1. Two to five players may play Contig.
2. To begin play, each player in turn rolls all three dice and determines the sum of the three numbers showing. The player with the *smallest* sum begins play. Play then progresses from left to right.
3. The first player rolls the three dice. He must use one or two operations on the three numbers shown on the dice. He is then allowed to cover the resulting number on the board with a marker. When he has finished his turn, he passes the dice to the player on his right. A player may *not* cover a number that has been previously covered.
4. To score in Contig, a player must cover a number on the board which is adjacent vertically, horizontally, or diagonally to another *covered* number. One point is scored for each *adjacent covered number.*
5. When a player rolls the dice and is unable to produce a number that has not already been covered, he must pass the dice to the next player. If he incorrectly passes the dice, believing he has no play when in fact he does have a play, any of the other players may call out the mistake. The first player to call attention to the error may place his marker on the proper uncovered number. This *does not* affect the turn of the player citing the error.
6. A cumulative score is kept for each player. A player is eliminated from further play in a game when he fails *in three successive turns* to produce a number that can be covered. When *all* players have experienced three successive failures to produce a coverable number, the game ends. The player with the highest cumulative score wins.

Variations of Contig

1. Use a one-minute egg timer to time the

CONTIG

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	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	44	45	48	50	54	55
60	64	66	72	75	80	90	96
100	108	120	125	144	150	180	216

turn of each player. This will tend to speed up the game.

2. Allow any player to challenge an opponent if the opponent does not choose the number that will score the maximum number of points. The challenger should then receive the difference between the number of points scored by the chosen number and the greater number of points that could have been scored.
3. For a faster game, allow only five turns for each player. The player with the highest score at the end of the fifth round would be the winner.
4. Allow students to play it as a solitaire game and attempt to score as many points as possible before experiencing three successive unsuccessful rolls of the dice.
5. To make the game easier, use a four-by-five array and the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 18, 20, 24, 25, 30, and 36. In this case, students use only *two* dice but play by the rules above.

Sample play (four players)

Suppose four players roll the dice in their respective turns as shown in table 1. Player 1 covers the 9 on the playing board ($2 + 3 + 4 = 9$) but does not score because no other numbers have been covered. Player 2 covers the 10 on the board ($[4 \div 2] \times 5 = 10$) and scores 1 point because the 10 is adjacent horizontally to the already covered 9. Player 3 covers the 11 ($[1 \times 5] + 6 = 11$) and scores 1 point because the adjacent 10 has already been covered. Player 4 covers the 2 ($4 - [6 \div 3] = 2$) and scores 3 points, one for the vertically adjacent 10 and one each for the diagonally adjacent 9 and 11.

Table 1

	Roll of dice	*Number covered*	*Points scored*
Player 1	2, 3, 4	9	0
Player 2	2, 4, 5	10	1
Player 3	1, 5, 6	11	1
Player 4	3, 4, 6	2	3

After the children have played the game for a while, questions like the following might be explored:

a) How were the numbers used in Contig selected?

b) What numbers would you use if you had two dice or four dice?

c) How many ways can you cover each number in Contig?

d) What is the highest score (without challenges) a player can make in a game?

e) Why are some numbers between 1 and 216 left off the Contig board?

f) Would it be possible to use all the numbers from 1 to 216 on a Contig board if the dice went from 1 to 10?

g) What is the probability of being able to cover 216 on your first throw?

h) Why is part of the Contig board still uncovered when everyone has passed three times?

Number Neighborhood

Rules

- Roll one die to see who goes first. Highest roll goes first, and play continues clockwise.

- The first player rolls all three dice and must use one or two operations on the three numbers. He/she records the move on the recording sheet and then colors in the resulting number on the board with a marker. Every player should use a different color marker.

SCORING: A player scores points by coloring a square adjacent (vertical, horizontal, or diagonal) to an already-colored square or squares. You score a point for every colored adjacent square. It is possible to score up to 8 points in one turn.
Note: Therefore, the first player will never score on his/her first turn - because there are no previously colored numbers on the board.

- If a player rolls and cannot color a number, the player must record a STRIKE in the column 'Points for Turn' and pass the dice to the next player. If he/she passes the dice in error and another player notices the play that could be made, that player may call attention to the error and place his/her counter on the number for points. This does not affect the turn of any players.

- When a player fails in three successive turns, he/she is eliminated. Play continues until there is only one player left. If you choose not to play the bonus round, the player with the highest cumulative score wins!

- **Bonus round:** After the game is over, each player is allowed 5 minutes to come up with as many expressions as they can for the numbers left on the board. They do not roll any dice, but are only able to use the numbers 1 to 6. They keep a list on the back of their recording sheet. After five minutes, they trade sheets and check each others' work. Each correct equation earns one bonus point.

NCTM Standard: Number & Operations

Grade level: Grades 4–8
Number of players: 2 or more (less is better)
Materials: Three dice, colored markers, student recording sheet, gameboard (1 for each game)

Number Neighborhood Student Recording Sheet Name:_____

Turn	Roll	Expression	Value	Points from Turn	Total Points
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Number Neighborhood
Gameboard

216	8	42	21	100	6	15	120
1	5	41	96	9	75	50	26
29	150	66	10	32	90	28	80
27	45	38	13	39	2	3	12
22	72	40	35	64	37	60	54
14	31	34	25	4	16	20	55
19	108	11	33	125	23	18	17
48	180	30	36	7	44	24	144

Money from Chores

Manuel wanted to save to buy a new bicycle. He offered to do extra chores around the house. His mother said she would pay him $8 for each door he painted and $4 for each window frame he painted.

If Manuel earned $40 from painting, how many window frames and doors could he have painted?

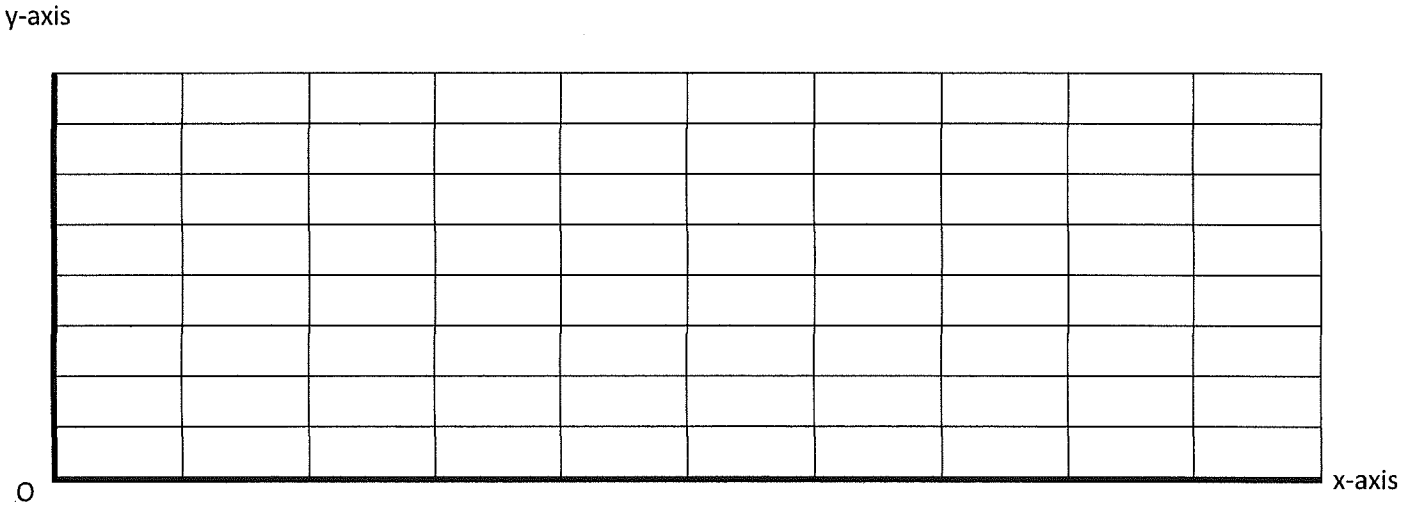
1. Write an expression showing how much Manuel will make from his painting chores.
2. Use the table below to find as many ways as possible Manuel could have earned $40 painting window frames and doors.

Windows (x)	Doors (y)	Work Space	Amount of Money Earned

3. **Did you find all the possible ways that Manuel could have painted windows and doors? How do you know?**

---

4. **Use the coordinate grid below to plot the windows and doors.**



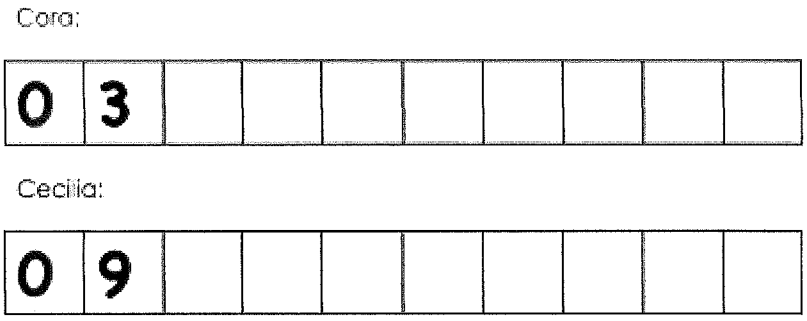
5.OA Sidewalk Patterns

Task

Cora and Cecilia each use chalk to make their own number patterns on the sidewalk. They make each of their patterns 10 boxes long and line their patterns up so they are next to each other.

Cora puts 0 in her first box and decides that she will add 3 every time to get the next number.

Cecilia puts 0 in her first box and decides that she will add 9 every time to get the next number.



a. Complete each girl's sidewalk pattern.

b. How many times greater is Cecilia's number in the 5th box be than Cora's number in the 5th box? What about the numbers in the 8th box? The 10th box?

c. What pattern do you notice in your answers for part b? Why do you think that pattern exists?

d. If Cora and Cecilia kept their sidewalk patterns going, what number will be in Cora's box when Cecilia's corresponding box shows 153?

Use the information below to answer Questions 1 – 4.

Sarah wants to build a stone wall along one side of her garden. Sarah collects stones from her yard. The first day, Sarah collects four small stones and five large stones. On the second day, Sarah collects eight small stones and eight large stones. On the third day, Sarah collects twelve small stones and eleven large stones.

If the pattern will continues, **complete the chart below to determine the amount of stones Sarah will collect on the tenth day.**

Sarah's Stone Wall		
Day	**No. of Small Stones**	**No. of Large Stones**
1	4	5
2	8	8
3	12	11
4		
5		
6		
7		
8		
9		
10		

Part A

1) Did Sarah collect more small stones or larger stones on the tenth day? _____

   - Sarah thinks she will need two tenths of the small stones or two tenths of the large stones collected on Day 10 to make the first layer of the wall. Which would give her the greater amount of stones? Write a statement comparing the two numbers. Justify your answer using words, models and or equations.

2) What rule could be used to describe the pattern of the stones below?

- The number of *small stones*? Explain your mathematical thinking to justify your answer using words, models, and or expressions.

- The number of *large stones*? Explain your mathematical thinking to justify your answer using words, models, and or expressions.

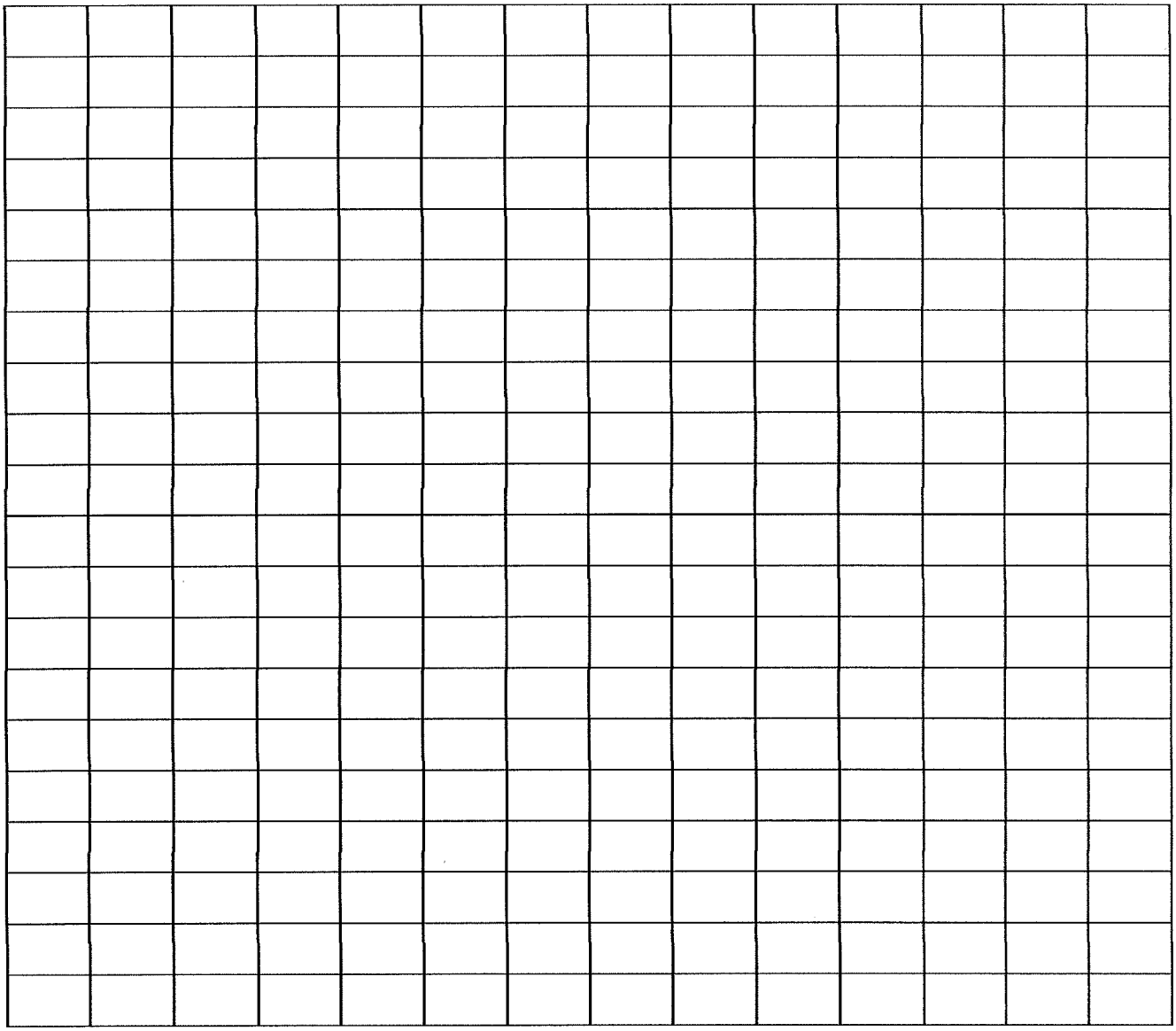
3) Write equations to represent the rules to show how to calculate the number of small stones and the number of large stones for any day. Use the variable **"d"** to stand the day.
Justify your answer for each by explaining how you know your rule works using words, models, and or equations.

- Equation for the number of small stones:

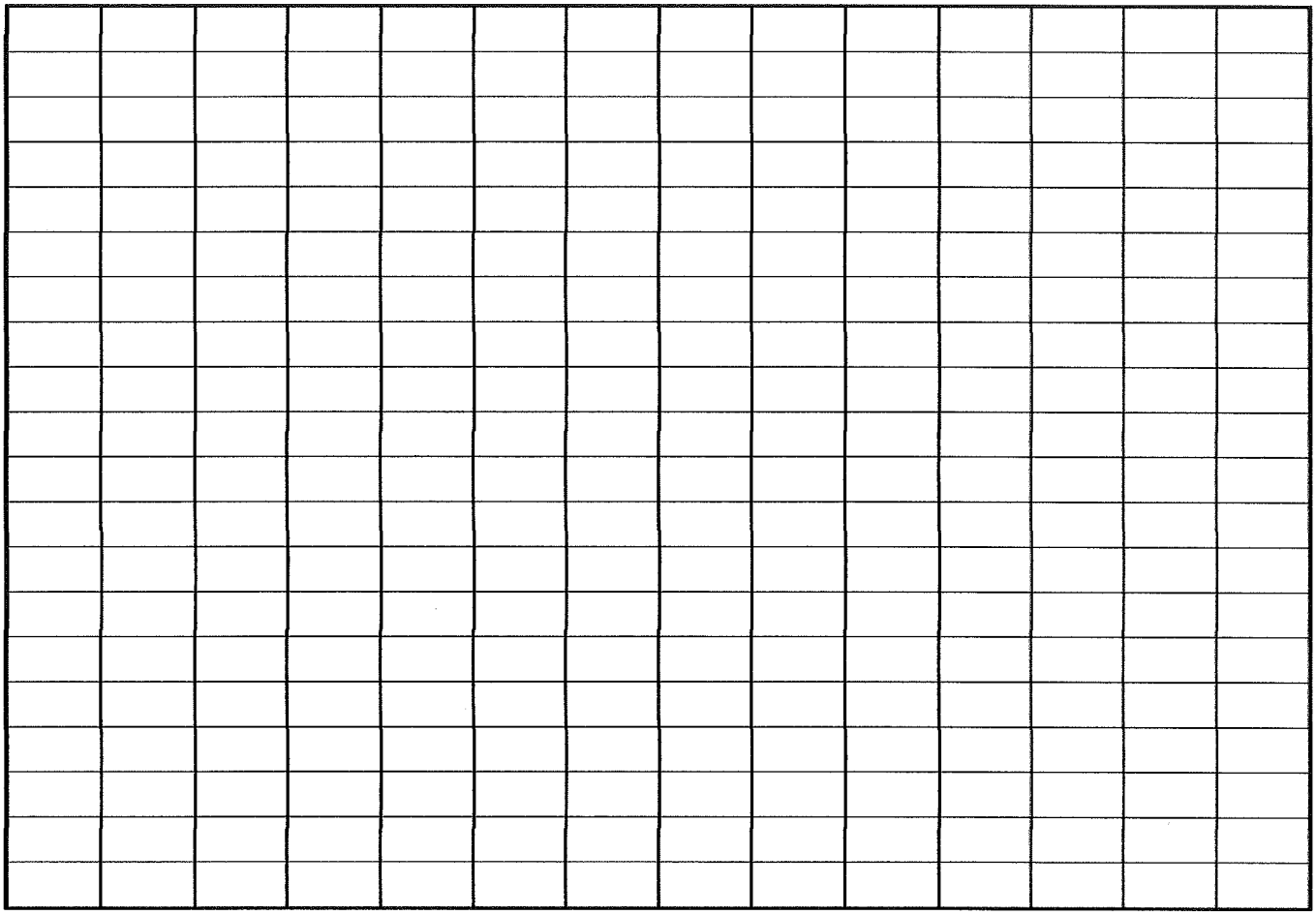
- Equation for the number of large stones:

4) Plot the ordered pairs on each graph below that represent the number of small and large stones collected each day.

Number of Small Stones Collected



Number of Large Stones Collected



Part B

5) Sarah decides she wants to use the stone wall as an enclosure for her garden. She chooses to plant some seeds in the garden. She wants a total of 39 plants in the garden. Sarah wants to write an equation that equals the amount of plants she wants in the garden using numbers and symbols. Her friend Joseph says she can write the following expressions to represent the amount of plants she wants in her garden:

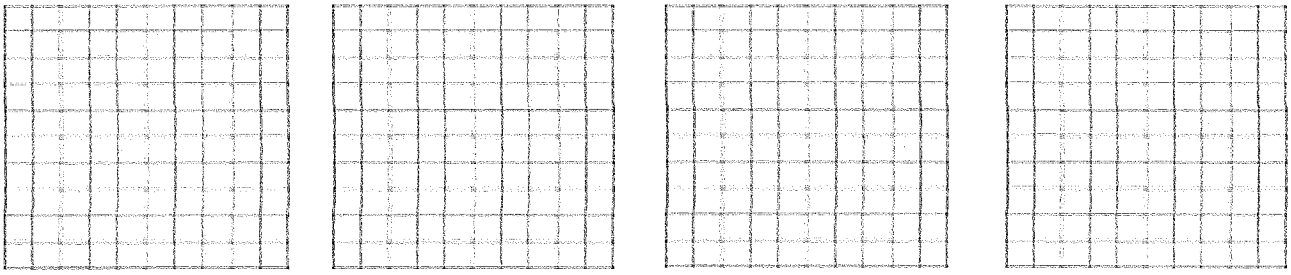
$6 + 7 \times 5 - 2$	or	$6 + (7 \times 5) - 2$

- Is Joseph correct? Why or Why not? Justify your answer.

6) After several months, Sarah's seeds grew and the plants produced squash, cucumbers, and tomatoes. She picks some tomatoes in her garden to make spaghetti. She picks 3.6 pounds of tomatoes. She decides to put them into bags that can each hold 0.3 pound.

Use the decimal grids below, assuming each grid represents one pound of tomatoes, to answer the problem.

- How many bags does Sarah use to hold the tomatoes? Show your solution using the decimal grids below.



- Justify your answer using words, models, and or equations.

Part C

7) Sarah decides to set up a vegetable stand to sell some of her vegetables from her garden. She sells a basket of vegetables consisting of squash, cucumbers, and tomatoes for $5 each. She also makes lemonade and sells it for $2.50 per gallon.

- If two people come to her stand and they each buy a basket of vegetables and a gallon of lemonade, how much do they pay altogether?

- Write an expression to represent the items purchased for both people.

HOMEWORK: FEBRUARY 4, 2019 5.NBT.1 (SCIENTIFIC NOTATION)

GREEN, RED, BLUE:

Little Jamil loves to watch YouTube! This website receives so many video uploads! If it contains three billion facts, how many millions is that? (First put into billions place value. Then see where the millions place value is in comparison. Then count how many zeros there are in the difference and move the decimal to the left or right.) What is the number difference? What is the scientific notation? Explain using math vocabulary.

RED, BLUE:

Little Brandon and Little Rocky found a video of Thor and Carter flying airplanes. They were fascinated because Thor and Carter are little dogs. They decide to search how many videos Thor and Carter have and discover they have 20,000! (Boy they have been busy!) However, Thor seems to be in more of the videos because Carter keeps being a baby and cries a lot. No one wants to see or hear that. Carter shows up in 2×10^3. How many videos is that? And how many thousands difference is that to Thor?

BLUE:

Little Dawson thinks it's ridiculous to watch videos of little dogs. He'd rather watch Donkeys playing the guitar. (It's more difficult because they don't have ANY fingers at all!) So, he searches up the number of videos and is grossly disappointed to find 2×10^1. What does that even mean?? What if the TOTAL time for all the videos were 1 ½ minutes long??

HOMEWORK: FEBRUARY 5, 2019 5. NBT.2 Decimals

GREEN, RED, BLUE

Little Lynnie and Little Lilith the unicorn want to buy carrots for their pink sheep. They purchased 17 pounds of carrots (sheep LOVE carrots!). Each pound cost 95 cents. What was the cost of the carrots? Explain using math vocabulary.

RED, BLUE:

Little Shay Shay thought that was a great deal. She decided to purchase 15 pounds. What was the cost? However, there were only 9 ½ pounds left. What is her cost now?

BLUE:

Little Friday heard that Thor loves apples and she is now a fan of the YouTube videos. She convinces Little Sister 2 to drive her to the farmer's market so she can buy apples. Little Friday brings $15.00. If the apples are $2.95 a pound, how many pounds can she buy? But there are not enough apples because she only finds 3 pounds. So, she decides to mix and match her fruits. Bananas are 49 cents a pound, strawberries are 1.85 a pound, and oranges are 75 cents a piece and each orange is ¾ of a pound. Use all fruits in some combination to come close to $15.00. (Your choice)

HOMEWORK : FEBRUARY 6, 2019 5.NBT. 2 SCIENTIFIC NOTATION

GREEN, RED, BLUE (Two questions!!)

Little Pop Tart simplified the expression 2.5×10^5 to standard form. His little sister asked what he was doing. After 15 minutes of explaining the method and the blank look on his sister's face, Little Pop Tart decides to write a statement describing what he did instead. What would that look like? **Explain using math vocabulary!**

Ex. I moved the decimal _____ places to the _____

Show the work out:

GREEN, RED, BLUE

Then Little Pop Tart's sister asked which is the equivalent to multiplying a number by 10^3?

a. Adding 10 three times
b. Adding 3 ten times
c. Multiplying by 10 three times
d. Multiplying by 3 ten times

RED, BLUE

Little DG wants to measure the hole he fell in back when he was skipping with Little Alan (it's a really big hole). He finds that it is 6.7×10^4 inches. What is that number in standard form?

BLUE:

Little Sister 2 and Little Sister 3 decide to go look at the actual hole. Little Sister 2 trips and falls in. Little Sister 2 is horrified and tried to help, but Little Sister 3 pulls him down. Little Messy thinks it's funny and decides to measure the hole first with a tape measure. The boys in the hole are approximately 4 ¾ feet tall. But, the hole is at least another foot above their head. Write a reasonable number in scientific notation that indicates the depth of the hole. (in inches)

HOMEWORK: FEBRUARY 7, 2019 **5.NBT.2** **SCIENTIFIC NOTATION**

GREEN, RED, BLUE

Little Mini Me needed to finish the table before she could go out and play with butterflies. Help her finish the table with the correct answers.

Expression	Solution
4.7 x 0.68	3.196
4.7 x 6.8	**A**
B	319.6
4.7 x 680	**C**

Explain the pattern between the expressions and solutions (on the back).

RED, BLUE

Little Delilah decided she would make mathematical tables for the items in her barn. She has **three** large horses that count as one each **and a** miniature horse that counts as **half**. Make a table to show the amount of horses (and a half) times .57, 5.7, 57, 570.

Expression	Solution
3.5 x .57	

BLUE:

Little M & M thought that the miniature horse counted for more than half. She thought it would be more like 2/3 the size of Delilah's regular horses. Little M & M also noted that the horses (and 2/3) were eating ¾ (and the according numbers like in the above tables). Fill in a table using the patterns above. (Convert 2/3 to a decimal (round to hundredths place) times ¾ (concert to decimal) move this decimal like the example above keeping the same numbers)

Expression	Solution
3._____ x ._____	
3._____x ___._____	

HOMEWORK: FEBRUARY 8, 2019 5.NBT.4 ROUNDING DECIMALS

GREEN, RED, BLUE: Little Windy loves her hamsters. She has two named Jerry and Luke. They are crazy for sunflower seeds. Jerry eats 1.435 pounds in one week. Luke eats 1.447 pounds in one week. Determine whether each statement is True or False. **SHOW YOUR WORK BY SOLVING THE EQUATIONS! Explain using math vocabulary.**

Jerry ate twelve thousandths pounds more than Luke.

Luke ate twelve thousandths pounds more than Jerry.

Jerry and Luke ate the same amount.

If rounded to the nearest tenth, they ate the same amount.

If rounded to the nearest hundredth, Luke ate more.

Round Jerry and Luke's sunflower intake to the nearest hundredth and list is here:

_____ and _____

RED, BLUE:

Round each measurement to the nearest: (Luke eats 1.4478 and Jerry eats 1.4329)

tenth:_____ _____

Hundredth:_____ _____

Thoudandth:_____ _____

BLUE:

Little Vinny H decides to hamster sit for Little Windy and Little Part Timer. The hamsters must be lonely and sad and they miss their parents. Little Part Timer loves hamsters. His hamsters John and Bob eat twice as much as Little Savvy's hamsters. How much do they each eat? How much do they eat together?

HOMEWORK: FEBRUARY 11, 2019 5.NBT.4 ROUNDING DECIMALS

GREEN, RED, BLUE

Little DaVion and Little Grimace wanted to play with the butterflies too. They had to complete the chart below before romping through the fields. Fill in the chart by checking the correct column after rounding the decimal to the nearest whole number. **Explain using math vocabulary (place value). (Place a check in the correct column, column I or column II)**

	Decimal	Column I	Column II
		7	8
A	7.06		
B	7.59		
C	7.47		
D	7.92		

RED, BLUE:

Little Pickles LOVES butterflies and decides to make her own live butterfly museum. She and Little KJ build a shed. They charge admission according to someone's love of butterflies. Estimate the amount of money they will make by rounding to the nearest whole number. (17 that attended paid $3.43 each and 14 attended paid $5.76) Then find the actual.

BLUE:

Little Blue LOVES pink butterflies. She devises a code and number for charging for each color butterfly according to the visitor's favorite (Pink, Blue, Purple, Green, Yellow, Orange). Make your own chart, round, and estimate for any numbers that work with 156 visitors in one day. (You cannot charge more than $10.50 per person, and each color must be a different amount of money. At least half of the days' visitors love purple love PURPLE the best. Each color must have a different number of visitors and a different price.)

HOMEWORK: FEBRUARY 12, 2019 5.NBT.7DECIMALS

GREEN, RED, BLUE:

Little Squeaker decides to buy clothes and candy in DE because there's no sales tax. He finds the deal of the day on 6.8 pounds on jelly beans. He wants to share them ***with*** 6 other friends. How many pounds will each person get? **EXPLAIN USING MATH VOCABULARY!**

RED, BLUE

Little BC wanst more jelly beans because they are delicious!!! He grabs 4.52 more pounds and combines them with Little Squeaker's amount. Now how many pounds will each friend get?

BLUE: (unit rate means to divide)

Little M & M tripped over a toy poodle that was barking in the candy store (that's totally why she likes cats better...). She grabbed onto Little Squeaker and 2.37 pounds spilled out of the bag. Now how much will each person get? And what is the unit rate per pound if the total cost was $45.17? What is the unit rate of the jelly beans per pound (they must pay for the spilled Jelly beans; just because she tripped doesn't mean they were free..)

HOMEWORK: FEBRUARY 13, 2019 5.NBT.7 Decimals

GREEN, RED, BLUE

Thor and Carter want to go out to eat breakfast. They catch a taxi cab to Panera because IHOP is gross. Panera goes through a lot of eggs! They spent $120.15 for eggs in one week. Each dozen costs them $0.89, what was the number of eggs that Panera bought? **Explain using MATH vocabulary!**

RED, BLUE

Thor posts his delicious dish on Instagram and gets 150 new followers! They all go to Panera the next week. When Panera purchases over 1800 eggs, they get them for $0.69 a dozen. If Panera spent $120.75 at the discounted price, how many eggs did they buy? What is the difference between the first week and the second week?

BLUE:

Carter gets jealous and posts his delicious dish on Facebook, Twitter, Instagram, and Pinterest (how does he do this without thumbs???) He gets 1200 new followers! But only ¼ of them go to Panera. Still the number of eggs they must purchase increases. When Panera purchases over 2000 eggs, they get them at $0.55How many new followers are there? What is the price they pay for 2000 eggs at $0.55 per dozen?

HOMEWORK: FEBRUARY 14, 2019 5. OA. 1 ALGEBRAIC EXPRESSIONS

SHOW ALL YOUR WORK!!!

GREEN, RED, BLUE

Evaluate the expression for, b= 8 **24 + b – 2 x b**

Evaluate the expression for, b= 9

Evaluate the expression for, b = 10

Explain using math vocabulary! (variables)

RED, BLUE

Evaluate the expression for b= 7 **24 + b – 3 x b**

Evaluate the expression for b= 2.5

Evaluate the expression for b= 1.2

BLUE (CHANGE THE FRACTIONS TO DECIMALS)

Evaluate the expression for b= 1 ½ **24 + b – 2 x b**

Evaluate the expression for b= 2 ¾

Evaluate the expression for b=20 **12 + b – 4 x b**

Evaluate the expression for b= 42.8

Evaluate the expression for b= 16 ¼

HOMEWORK: FEBRUARY 15, 2019 5. O.A. 1 ALGEBRAIC EQUATIONS

GREEN, RED, BLUE

Little Jazzy is excited about math. He and Little BC challenge each other. Complete the problems below then **Explain how algebraic equations work using math vocabulary.**

Write the algebraic equation. Five times a number y is increased by 3 is 23.

Write the algebraic equation. Eight times a number y is increased by 8 is 72.

Write the algebraic equation. Four times a number y is increased by 6 is 56.

RED, BLUE

Little LoLo and Little iPhone 5c notice that there are a lot of donkeys. Cousins, aunts, uncles, grandmas, grandpas, and siblings of donkeys keep visiting! Some are leaving, some are staying. Seven times a number of donkeys (d) is increased by 7 and equals 78. Write the algebraic equation.

BLUE

This donkey commune is getting out of control. Farmer Sister 1 went in to put an end to this nonsense! He made some leave. So now write the equation for three times the number of donkeys (d) subtracted by 5 and equals 52.

Now one donkey named Larry trips over Little Grandma's dirty boot (how did it end up at the farm???!!!) It leaves and goes to the donkey hospital. Write a sensible equation now. (Don't forget, animal lover Little DG drives him to the hospital and must take his cousin Martha and Sheila for moral support.)

HOMEWORK: FEBRUARY 18, 2019 REMEMBER: PEMDAS 5.OA 2

GREEN, RED, BLUE

Little Busy Bee and Little Jayden had to solve the problems before they could go caterpillar hunting. Help him by selecting all of the choices that correctly answer the question below:

Which expressions have the same value? **SHOW ALL YOUR WORK! EXPLAIN USING MATH VOCABULARY!**

2 x 5 + 3 x 2 + 4

2 x (5 + 3 + 2 + 4)

2 x 5 + 3 x (2 + 4)

2 x (5 + 3) x 2 + 4

(2 x 5) + (3 x 2)

2 x (5 + 3) x (2 + 4)

RED, BLUE

Little Blue and Little Shay Shay wanted to find caterpillars too, but they had to solve these equations first. Help him by solving the following expressions

4 x 6 + 4 x 9 + 8

4 x (4 + 2 x 5 + 6)

4 x 4 + 2 x (8 + 8)

BLUE:

Little Sister 3 is the farm architect. The donkeys want to figure out how to incorporate bedrooms, kitchens, and bathrooms on their farm in their commune. They want to have 5 times more than 6 bathrooms and 11 more kitchens than 7 bedrooms. Write an equation for their crazy floor plan. Can you help Little Sister 3 figure out the number of each?

HOMEWORK FEBRUARY 19, 2019 5.OA. 2 ALGEBRAIC EXPRESSIONS

GREEN, RED, BLUE:

Thor and Carter want to look for grubs to feed the Meerkats. They need to solve the following expressions first.

Match each problem in column A to its correct expression in Column B. **Explain using math vocabulary (on the back of this paper). Then Solve:** **Answer below:**

Column A	Column B
A. Nineteen times the sum of thirteen and twelve	i. (42 + 99) - 85
B. Fifty-eight times the sum of twenty-one and thirty-two.	ii. 22 / 11 - 16
C. Eighty-five less than the sum of forty-two and ninety-nine	iii. 19 x (13 + 12)
D. Sixteen less than the quotient of twenty-two divided by eleven	iv. 58 x (21 + 32)

RED, BLUE : Write the correct expression in column B- **Then Solve** **Answer below:**

Column A	Column B
Seventy-two times the sum of fifteen and forty two.	
Sixty-five times the sum of thirty one and forty-seven	
Ninety-one less than the sum of thirteen and eighty-eight	
Eleven less than the quotient of eighty-one divided by twenty-seven	

BLUE: Simon doesn't care for Grubs or Meerkats. He loves math though, so he decides to solve the following expressions. Write the expression for the numerical expression in Column B. Give the written form in column A, then actually solve the equation. **Answer below:**

Column A	Column B
	71 x (18 / 3)
	43 x (82 + 34)
	100 / 4 - 9
	(78 + 132) – 47

HOMEWORK: FEBRUARY 20, 2019 5. O.A. 3 ALGEBRAIC EQUATIONS

GREEN, RED, BLUE

Thor and Carter are flying model airplanes. Both planes take off at the same time. Thor's plane climbs 3 feet every second. Carter's plane climbs 6 feet every second. Complete the table below. **Explain and identify the pattern for each row.**

Seconds	**1**	**2**	**3**	**4**	**5**
Thor					
Carter					

RED, BLUE

Simon wants to see the planes to go FASTER!!! He decides to add a little N2O (nitrous oxide) to the engines. Now, Thor's plane flies 8 feet per second. Carter's plane climbs 14 feet per second! Complete the table below. Identify the pattern for each row.

Seconds					
Thor					
Carter					

BLUE:

Thor and Carter decide they want to create an apparatus for flying the baby donkeys in the commune. This will eliminate traffic jams. But even the baby donkeys are heavy, so they don't fly very fast. Create a table where baby donkey 1 flies 1.75 feet faster per second than baby donkey 2 but they both start out at 0 feet per second before launch time! Unfortunately, the apparatus crashes after eight seconds. (Don't worry, the donkeys are okay)

Seconds	0								
Donkey 1	0								
Donkey 2	0								

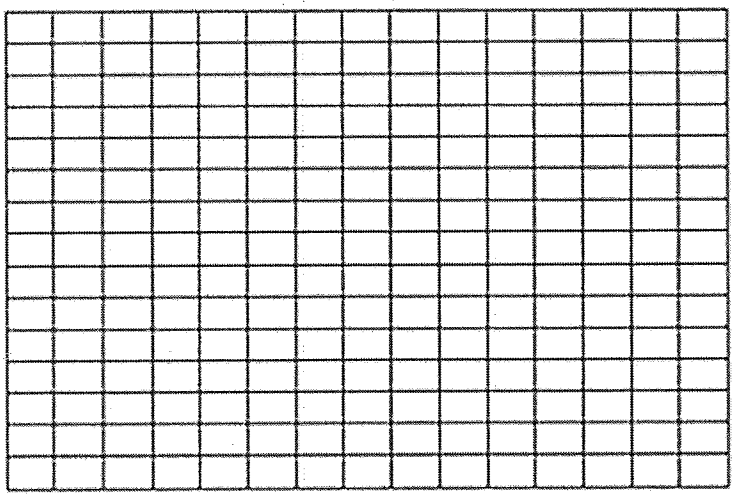
HOMEWORK: FEBRUARY 21, 2019 5. O.A. 3

GREEN, RED, BLUE

Thor bought 4 movie tickets for a total of $32. Carter bought 6 movie tickets for a total of $36. Create a table to show the pattern of the prices of the movie tickets for Thor and Carter. Create a table then plot it on a graph. **(linear graph NOT a bar graph and EXPLAIN how to plot coordinate points on a graph on the back of this paper) Label your graph!!!**

Table

Tickets						
Thor						
Carter						



RED, BLUE

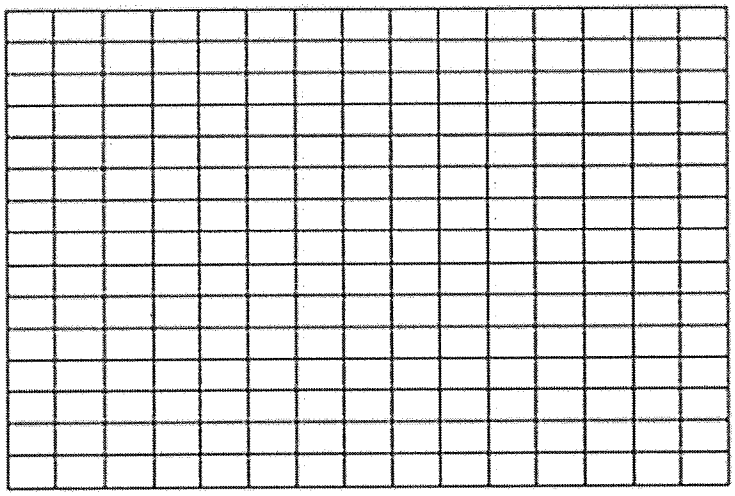
Thor got mad at Carter because he was being a baby. So, Thor decided to sell his tickets, but could only get $20 for all 4 tickets. Carter said he didn't care what Thor thought, so he sold his movie tickets too. But Carter got $42 for all 6 of his tickets! Create a table to show the pattern of the prices of the sold movie tickets. (Hint: make a table like the one above)

BLUE: Thor and Carter felt bad that the baby donkeys crashed upon lift off. So, they decided to take them to the movies instead. Create a table for the donkeys and tickets if Thor paid ¼ as much for his 5 tickets as Carter did at 4 tickets for $60.00. How much is each ticket?(Make another table)

HOMEWORK: FEBRUARY 22, 2019 5. G. 1 COORDINATE GRIDS

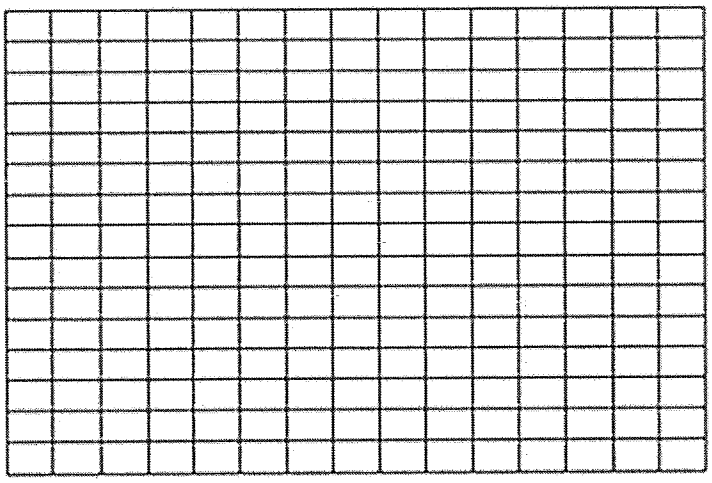
GREEN, RED, BLUE: Thor and Carter are flying model airplanes. Both planes take off at the same time, Thor's plane climbs 4 feet every second. Carter's plane climbs 7 feet every second. Complete the table below. Identify the pattern. And then graph it. **EXPLAIN on the back.**

Seconds					
Thor					
Carter					



RED, BLUE: Change the table above to reflect that Thor's plane climbs 2 feet per second and Carter's climbs 6 feet per second. Fill in the table and graph the coordinate pairs.

Seconds					
Thor					
Carter					



BLUE: create a pattern where Thor starts to fly his plane 1 second before Carter. Thor's plane climbs 9 feet per second and Carter's climbs 1/3 as high per second because Thor ripped a wing off Carter's plane. (Just create a table, you don't have to graph it). It crashed after 7 seconds (BOO)!

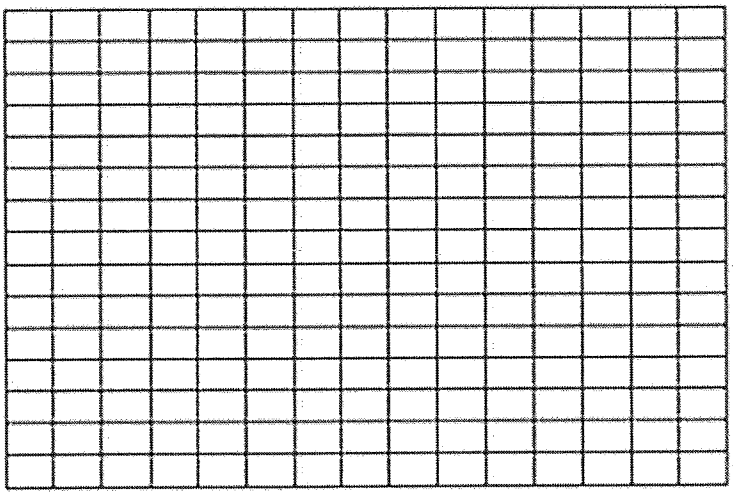
HOMEWORK: FEBRUARY 27, 2019 5. G. 1 **5.G.1 COORDINATE GRIDS**

GREEN, RED, BLUE: Simon bought 4 movie tickets for a total of $24. Holly bought 5 movie tickets for a total of $25. Create a table to show the pattern of the prices of the movie tickets for Simon and Holly. (make two tables) Then graph the coordinate pairs. **Explain on the back of this paper using math vocab**

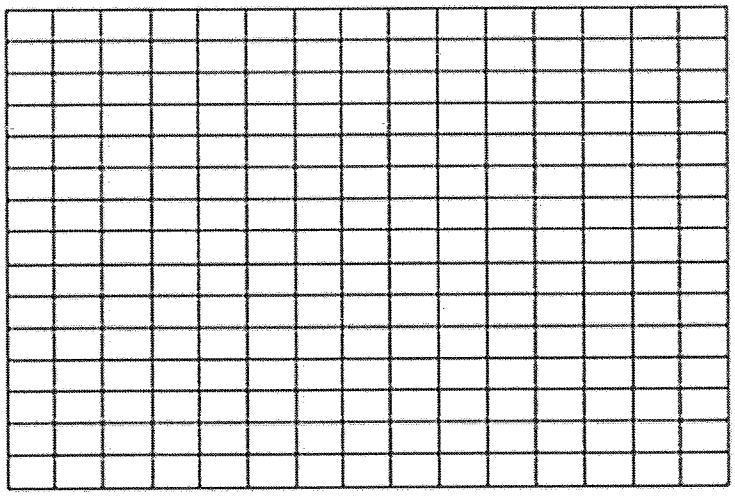
Table 1:

Table 2:

RED, BLUE: Change the pattern so that Simon buys 3 for $21 and Holly buys 6 for $36. Create a table then graph it.



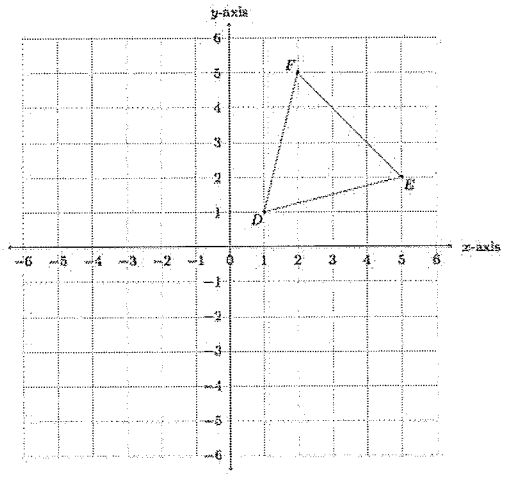
Blue: Make up your own word problem and change the pattern. Solve and graph.



HOMEWORK : FEBRUARY 28, 2019 **5. G. 2 COORDINATE GRIDS**

GREEN, RED, BLUE

Which point represents an ordered pair ***inside*** the triangle? Circle the set. List the coordinate pairs for points D,E, F. **EXPLAIN HOW COORDINATE PAIRS ARE USED IN GRAPHING!**

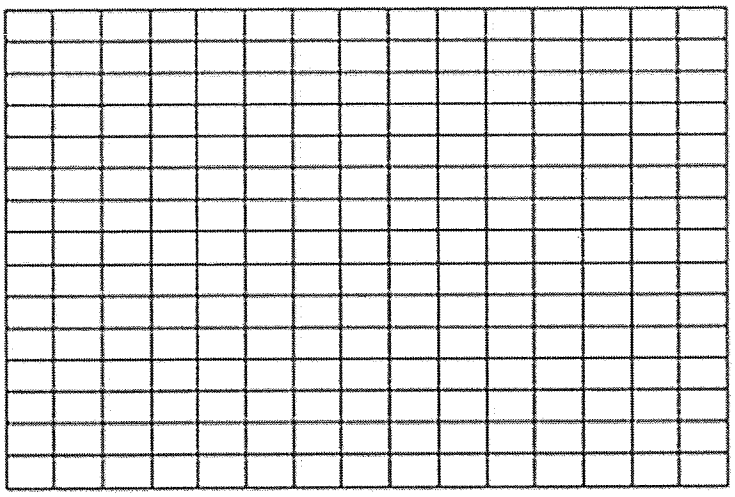


{ (2, 1) (3, 3) (5, 2) (4, 4) } Set to choose from

RED, BLUE

Plot the coordinate grid shape then plot 3 ordered pair that fall inside the shape. (make them up!)

{ (2, 1) (4, 1) (1, 5) (5, 5) } – PLOT **List the 3 pairs below:**



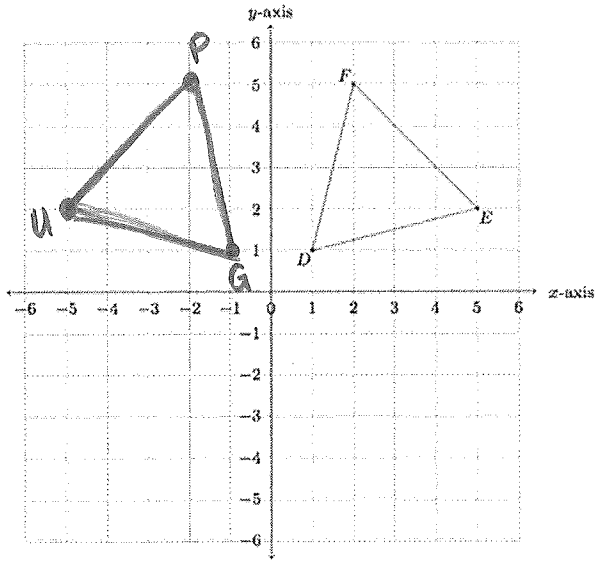
BLUE

Place these points: (6.5,4.5) (6,3) (7,2) **inside** any shape, then give the coordinates to create the shape. You may use negative coordinates if you want.(or ½ measurements)

HOMEWORK: MARCH 1, 2019 5. G. 2 COORDINATE GRIDS

GREEN, RED, BLUE

Which point represents an ordered pair inside the triangle? Circle the set. List the pairs for points P, U, G. **EXPLAIN USING MATH VOCABULARY!**

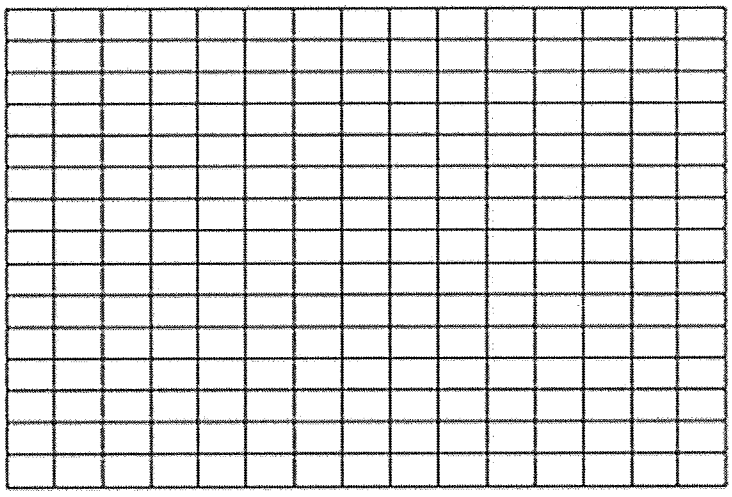


{ (-3,1) (-3,3) (-1,2) (-6,3) }- Set to choose from

RED, BLUE

Plot the coordinate grid shape then plot 3 ordered pairs that fall inside the shape.

{ (2, 1) (4, 1) (1, 7) (5, 7) } – PLOT **List 3 PAIRS below:**



BLUE: Give the coordinates to create a shape, then list 4 coordinates inside the shape. (use decimals and/or fractions: like 3.5 or 3 ½ but now you can't use my example)

SONG PROJECT INSTRUCTIONS DUE: MARCH 11, 2019

You are an executive at Sony. You will be charting songs and artists to decide if their music style fits the profile that you want. Therefore, you must record data in a table for low, medium, and high pitches. In order to analyze the data, you must graph it. Then you will present your findings on a presentation board to the board of executives. SO, your board (construction paper) must be NEAT AND CLEAN!

Choose songs that are appropriate. You must be able to track the time in order to chart the data. Use increments of 30 seconds. The range is 30 (seconds) to 4:30 (minutes and seconds). DO NOT GO PAST 4:30! If your song ends before 4:30, then chart the data where it ends.

Next: Use the data in the chart to plot the X,Y coordinates on the grid.

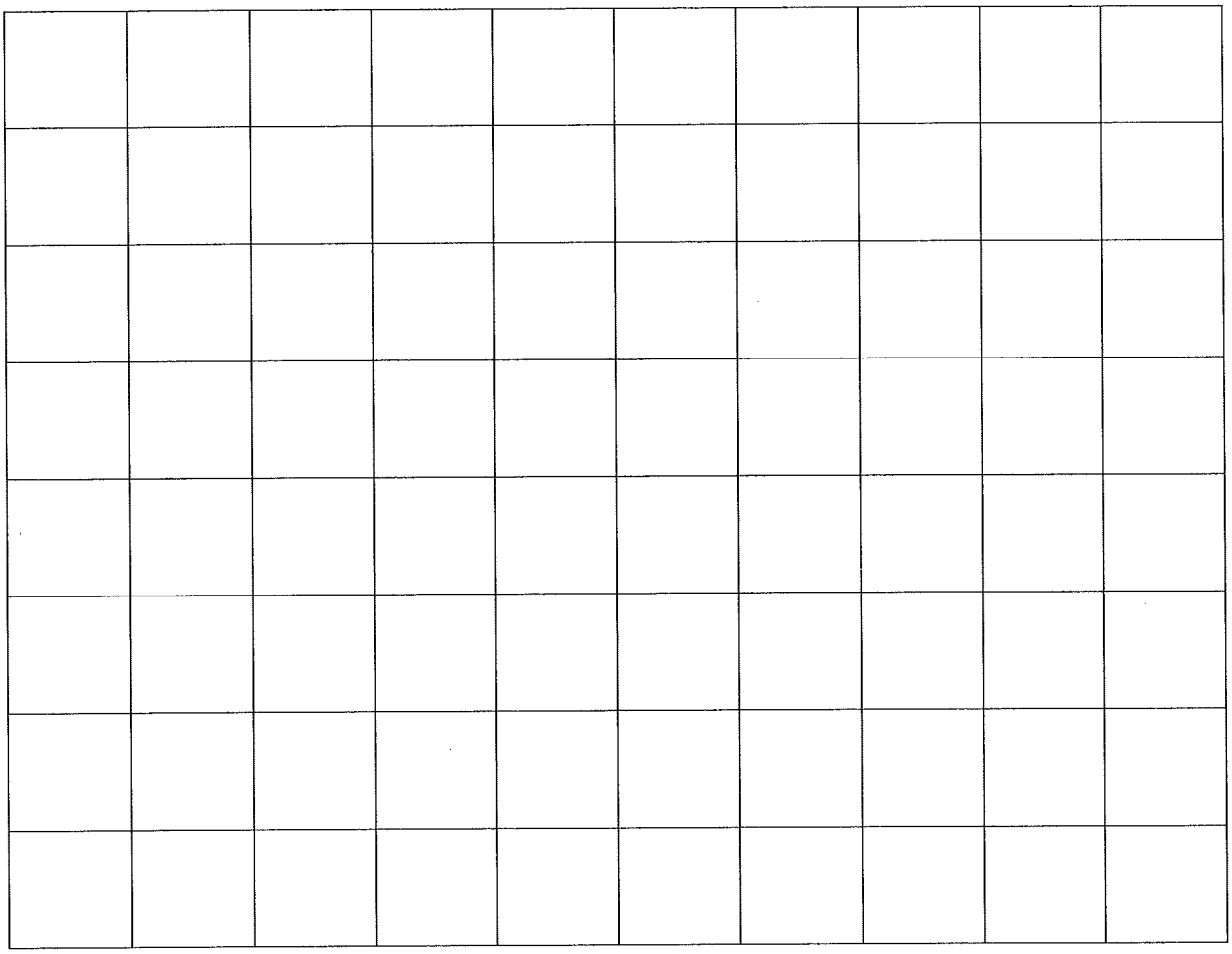
Y is the pitches (low, med, high) and X is the time in seconds. Label your X and Y axis.

MAKE SURE YOU USE A KEY! Since you have more than 1 song to plot, then you must use a key and make each song a different color or symbol.

EXAMPLE:

LAST: cut out your tables and graph NEATLY and glue to the construction paper that I gave you.

TITLE:_____



KEY:

Song Project

Unit Rates in a table with X, Y coordinates

Song 1

Title:_____

Artist:_____

	30 (X)	1:00(X)	1:30(X)	2:00(X)	2:30(X)	3:00(X)	3:30(X)	4:00(X)	4:30(X)
Low (Y)									
Med (Y)									
High (Y)									

Song 2

Title:_____

Artist:_____

	30 (X)	1:00(X)	1:30(X)	2:00(X)	2:30(X)	3:00(X)	3:30(X)	4:00(X)	4:30(X)
Low(Y)									
Med(Y)									
High(Y)									

Song 3

Title:_____

Artist:_____

	30(X)	1:00(X)	1:30(X)	2:00(X)	2:30(X)	3:00(X)	3:30(X)	4:00(X)	4:30(X)
Low(Y)									
Med(Y)									
High(Y)									

Song 4

Title:_____

Artist:_____

	30(X)	1:00(X)	1:30(X)	2:00(X)	2:30(X)	3:00(X)	3:30(X)	4:00(X)	4:30(X)
Low(Y)									
Med(Y)									
High(Y)									

Song Project EXPLANATION

Song Project Rubric

4 All titles are labeled: Title of chart X axis Y axis Intervals	3 3 of 4 titles labeled Title of chart X axis Y axis Intervals	2 2 of 4 titles labeled Title of chart X axis Y axis Intervals	1 1 of 4 titles labeled Title of chart X axis Y axis Intervals
4 All parts to key is present and labeled: Title of KEY, symbol, color, and title of song.	3 3 of 4 parts of key are present and labeled: Title of KEY, symbol, color, and title of song	2 2 of 4 parts of key are present and labeled: Title of KEY, symbol, color, and title of song	1 1 of 4 parts of key are present and labeled: Title of KEY, symbol, color, and title of song
4 All four song coordinates are plotted correctly on graph with different color lines connecting the pairs.	3 Three of the four song coordinates are plotted correctly on graph with different color lines connecting the pairs.	2 Two of the four song coordinates are plotted correctly on graph with different color lines connecting the pairs.	1 One of the four song coordinates are plotted correctly on graph with different color lines connecting the pairs.
4 Explanation is clear, using math vocabulary and describing how coordinate pairs are plotted. Explanation includes correct spelling and grammar as well as the reason for using a graph.	3 Explanation is mostly clear, using math vocabulary and describing how coordinate pairs are plotted. Explanation may not include correct spelling and grammar as well as the reason for using a graph.	2 Explanation is somewhat clear, using math vocabulary and describing how coordinate pairs are plotted. Explanation is missing correct spelling and grammar as well as the reason for using a graph.	1 Explanation is not clear, and missing math vocabulary and describing how coordinate pairs are plotted. Explanation does not include correct spelling and grammar as well as the reason for using a graph.

THIS SONG PROJECT IS WORTH A TEST GRADE!!!!!