Summer Math

Parents,

In addition to the attached work, I want to encourage you to have your child work on their multiplication facts over the summer. These facts are CRUCIAL to their success in math beginning in 4th grade and continuing on through their high school years. Many students enter 4th grade and are still struggling with this area, so working on them over the summer will give them a great jumpstart on their year.

Listed below are some great resources, both paper/pencil and online. No matter which method you choose, working on multiplication facts will give your student a solid foundation.

Mrs. Burton

Worksheets (these can be printed at home):
https://www.math-drills.com/multiplication.php
https://www.k5learning.com/free-math-worksheets/math-drills/multiplication-facts

Online:
https://99math.com/register?role=student - If students log in with their school Google email (use the Login with Google button), their work will be tracked over time, allowing you to see their progress
https://matikaworlds.sadlierconnect.com/

iPad:
Mental Math Cards - this app allows students to practice against the clock; they can say or type the answer

Give the best answer for each question.

1. What is 461 rounded to the nearest hundred?

_____

2. Each classroom has 30 students. How many students are in 5 classrooms?
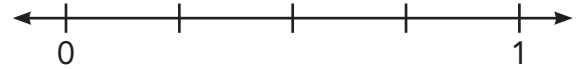
○ 100 students

○ 150 students

○ 160 students

○ 180 students

3. What is 854 rounded to the nearest ten?

○ 800

○ 850

○ 860

○ 900

4. Add.

　298
+　43

5. Plot $\frac{2}{4}$ on the number line.

0　　　　　　　　　　1

6. Which equations also represent $2 + 2 + 2 + 2 + 2 = 10$? Select **all** that apply.

○ $5 \times 2 = 10$

○ $2 \times 2 = 10$

○ 2 fives = 10

○ 5 twos = 10

7. A school play costs $5 for each adult ticket and $3 for each student ticket. A family buys 3 student tickets and 1 adult ticket. How much does the family spend on tickets?

$_____

8. Add.

　475
+187

9. Match each multiplication expression with its product.

7 × 8	32
6 × 4	56
8 × 4	42
4 × 4	16
7 × 6	24

10. Bryan has 3 boxes of apples. Each box has 20 apples. How many apples does Bryan have in all?

_____ apples

11. If the perimeter of the rectangle is 36 cm, what is the value of *x*?

x

3 cm
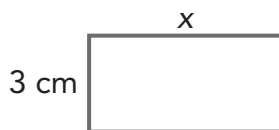
○ 3 cm   ○ 6 cm

○ 9 cm   ○ 15 cm

12. Eighteen children go on a trip in 3 vans. Each van takes the same number of children. How many children ride in each van?

_____ children

13. Which fractions describe the point on the number line? Select **all** that apply.

0 ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯ 1

○ $\frac{2}{6}$ ○ $\frac{1}{4}$

○ $\frac{4}{8}$ ○ $\frac{1}{2}$

14. Ken buys 7 pairs of socks for $2 each and a T-shirt that costs $12. How much does Ken spend?
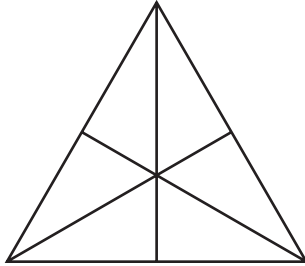
$ _____

15. Which multiplication equations are true? Select **all** that apply.

○ 10 × 1 = 10

○ 0 × 7 = 7

○ 1 × 1 = 1

○ 0 × 0 = 0

○ 9 × 1 = 0

16. A rectangular rug has an area of 40 square feet and a length of 8 feet. What is the perimeter of the rug?

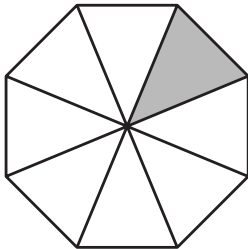_____ ft

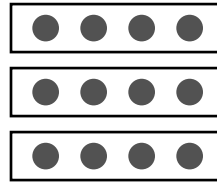**17.** Shade $\frac{4}{6}$ of the triangle.

18. Divide.

$40 \div 5 = ?$

○ 7   ○ 8

○ 9   ○ 10

19. Which fraction represents the shaded part?

○ $\frac{1}{3}$

○ $\frac{1}{4}$

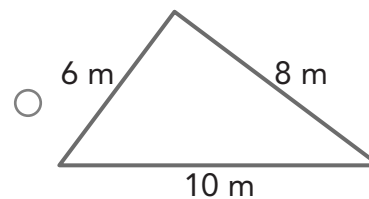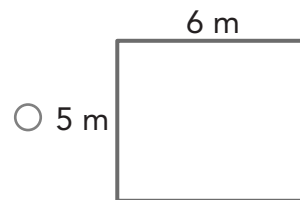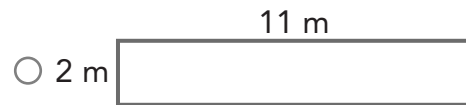○ $\frac{1}{6}$

○ $\frac{1}{8}$

20. What is a division equation for the model?

_____

21. A number line from 0 to 1 is divided into 7 equal parts. What does the mark before $\frac{4}{7}$ represent?

○ $\frac{5}{7}$ ○ $\frac{1}{2}$ ○ $\frac{3}{7}$ ○ 0

22. Which figure has a perimeter that is less than 24 meters?

11 m
○ 2 m

6 m
○ 5 m

6 m   8 m
○
10 m

23. What is the equivalent addition equation for $2 \times 7 = 14$?

_____

24. Find the unknown number.

$8 \times$ _____ $= 56$

25. What fraction describes the point on the number line?

_____
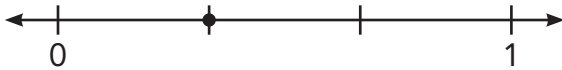
26. Rachel plans to bake 120 cookies for her friend's birthday party. So far, she has baked 4 batches of 20 cookies each. How many more cookies does she need to bake?

_____ cookies

27. Shade $\frac{3}{4}$ of the model.

28. Find the unknown number.

_____ $\times 6 = 54$

29. Write the fractions in order from least to greatest.

$\frac{2}{3}$ $\frac{2}{6}$ $\frac{2}{8}$

_____

30. Find the area.

6 units

3 units

The area is _____ square units.

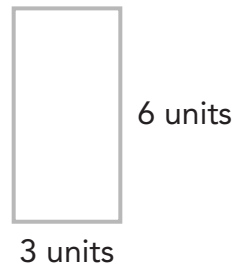**31.** Describe a context in which a total number of items can be expressed as 3×8. What is the total number of items?

32. Jared says that 748 rounded to the nearest hundred is 800 because 8 is greater than 5. He said, "I round up 748 to 750, and then 750 to the nearest hundred is 800." Is Jared correct? Explain.

33. Sam cuts a small pie into 6 equal pieces. His younger brothers eat 4 pieces. Sam eats the rest. What fraction of the pie does Sam eat? Explain how you got your answer.

34. All squares are parallelograms. Are all parallelograms squares? Explain.

35. Peter is packaging cookies for a bake sale. He made a total of 48 cookies and wants to put the same number of cookies in each bag. How many more bags will Peter have if he puts 4 cookies in a bag instead of 6 cookies in a bag? Explain.

36. There are no passengers on the bus before the first stop. At the first three bus stops, 4 people get on at each stop and no one gets off the bus. At the fourth bus stop, 7 people get off the bus and no one gets on the bus. Lara says that there are now 5 passengers left on the bus. Maya says that there are now 11 passengers left on the bus. Who is correct? Explain.

37. A group of 12 students will be assigned seats at 3 tables. The same number of students will sit at each table.

Which facts can you use to find how many students will sit at each table? Select **all** that apply.

○ $12 \div 3 = 4$ ○ $12 + 3 = 15$

○ $3 \times 4 = 12$ ○ $12 - 3 = 9$

38. Use the table.

×	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Part A
What pattern do you see when multiplying two odd numbers?

An odd number times an odd number is _____.

Part B
What pattern do you see when multiplying an odd number and an even number?

An odd number times an even number is _____.

39. Part A
Compare.

$\frac{3}{4}$ ◯ $\frac{3}{8}$

Part B
Explain your answer.

40. There are 9 rows in Luisa's section at the theater. Each row has 5 seats.

Part A
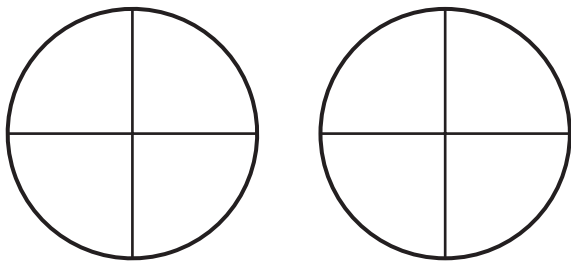Make an array to represent the situation.

Part B
How many seats are there altogether in Luisa's section?

_____ seats

41. Part A
Model $\frac{1}{4}$ and $\frac{3}{4}$ by shading the circles.

Part B
Compare the fractions. Write $<$, $>$, or $=$.

$\frac{1}{4}$ ◯ $\frac{3}{4}$

42. Jonathan makes a picture frame.
His frame is a trapezoid.

Part A
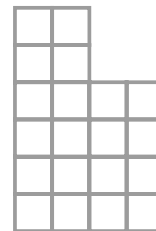Draw one way Jonathan could
have made his frame.

Part B
How many right angles could the frame have?

Select **all** that apply.

○ 0   ○ 1   ○ 2   ○ 3   ○ 4

43. Part A
How can you decompose the given shape into
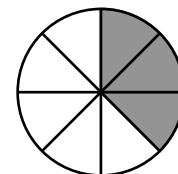rectangles to find its area?

Part B
What is the area of the shape?

_____ square units

44. Part A
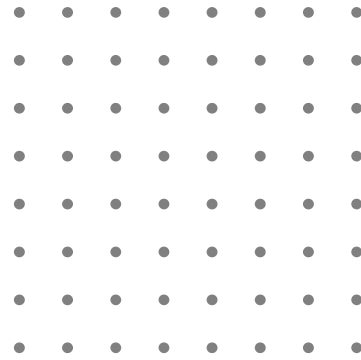What fraction is shown by the model?

_____

Part B
Explain how you found the denominator.

45. **Part A**
Draw a quadrilateral with one right angle,
no parallel sides, and two sides of equal length.

Part B
Is your figure a trapezoid? _____

46. In the figure, each small square is 1 square unit.
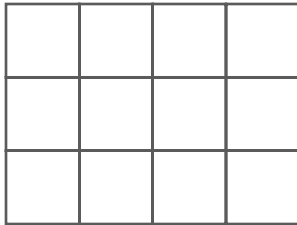
Part A
Write an addition equation you could use to find the
total area of the rectangle.

_____

Part B
Write a multiplication equation you could use to find
the area of the rectangle.

_____

47. Madelyn buys 5 boxes of pens. Each box has 3 red pens
and 6 blue pens. Madelyn says she has 90 pens.

Part A
What is Madelyn's error?

Part B
How many pens did Madelyn buy?

_____ pens

Rising 4th Grade Reading Assignment

Students will choose a novel from the following list to read:

- Blackwood, Gary. *The Shakespeare Stealer*
- Burnett, Frances Hodgson. *The Secret Garden*
- Carroll, Lewis. *Alice's Adventures in Wonderland*
- Dahl, Roald. *Charlie and the Chocolate Factory*
- D'Aulaire, Ingri & Edgar. *Leif the Lucky*
- Daugherty, James. *The Magna Charta*
- de Angeli, Marguerite. *The Door in the Wall*
- Du Bois, William Pene. *Twenty-one Balloons*
- Estes, Eleanor. *Ginger Pye*
- Henry, Marguerite. *King of the Wind*
- Green, Roger Lancelyn. *King Arthur and His Knights of the Round Table*
- Konigsburg, E. L. *From the Mixed-Up Files of Mrs. Basel E. Frankweiler*
- Lewis, C. S. *Prince Caspian*
- Norton, Mary. *The Borrowers*
- Prum, Deborah M. *Rats, Bulls, and Flying Machines*
- Rebsamen, Frederick. *Beowulf*
- Sis, Peter. *Starry Messenger: Galileo*
- Stanley, Diane and Peter Vennema. *Bard of Avon*
- Stanley, Diane. *Joan of Arc*
- Vernon, Louise A. *Thunderstorm in the Church*
- White, E. B. *The Trumpet of the Swan*
- Alexander, Lloyd. *The Book of Three*
- Armstrong, William. *Sounder*
- Babbitt, Natalie. *Tuck Everlasting*
- Burnett, Frances H. *A Little Princess*
- Carlson, Natalie. *The Family Under the Bridge*
- Estes, Eleanor. *The Hundred Dresses*
- Knight, Eric. *Lassie Come-Home*
- L'Engle, Madeliene. *A Wrinkle in Time*
- Lenski, Lois. *Prairie School*
- Lenski, Lois. *Strawberry Girl*
- Lowry, Lois. *Number the Stars*
- McSwigan, Marie. *Snow Treasure*
- Seredy, Kate. *The Good Master*
- Speare, Elizabeth. *The Sign of the Beaver*
- Taylor, Sydney. *All-of-A-Kind Family*
- Thurber, James. *Many Moons*
- Verne, Jules. *20,000 Leagues Under the Sea*

- Wilson, N. D. *100 Cupboards*
- Farley, Walter. *The Black Stallion*
- Funke, Cornellia. *Inkheart*
- George, Jean C. *My Side of the Mountain*
- Grahame, Kenneth. *The Reluctant Dragon*
- Hanes, Mari. *Two Mighty Rivers*
- Jacques, Brian. *Redwall*
- Lofting, Hugh. *The Voyages of Dr. Dolittle*
- Morey, Walt. *Gentle Ben*
- Peretti, Frank. *The Cooper Kids Adventure*
- Riordan, Rick. *The Lightning Thief*
- Smith, Dodie. *The 101 Dalmations*
- Street, James. *Good-bye My Lady*
- Travers, P. I. *Mary Poppins*
- Wilson, N. D. *Leepike Ridge*
- Adamson, Joy. *Born Free*
- Alcott, Louisa May. *Little Women*
- Burnford, Sheila. *The Incredible Journey*
- Field, Rachel. *Calico Bush*
- Lawson, Robert. *Ben and Me*
- Robertson, Keith. *Henry Reed, Inc.*
- Sewell, Anna. *Black Beauty*
- Sidney, Margaret. *Five Little Peppers*

After reading the novel, students will choose one of the following options for sharing their novel. These may be done in physical hard copy or in digital or online format (you have access to Google Docs and Slides through your school email address). Any digital or online projects need to be submitted to mburton@charlestonchristian.org when school begins.

- Movie pitch

Making movies based on popular books is a Hollywood staple. Create an "elevator pitch" (i.e., a pitch delivered in the time it would take to ride an elevator) that explains to a producer why the book would make a good movie, give suggestions about who should play the characters, and identify an element that might need to change for the movie version. This activity obviously works best with books that have not already been made into movies.

- Book/movie comparison

If you read a book that has already been made into a movie, write a comparison between the book and the movie. Include information about key changes from the book and develop ideas about why these changes were made and how effective they were.

- Book cover analysis/design

Take a close look at several book covers and make a list of common elements, such as the title, author, images, book blurbs, etc. List some examples that were effective and some that were less successful. Then, design a cover for the book you read. Be able to explain the elements you chose to include and how they relate to the book.

- Interview with a character

Sometimes a character in a book feels so real that you can almost imagine talking to them. Write questions you would ask a character in the book you read. When you have finished writing the questions, answer them from the perspective of the character. If a video camera is available, you could create a mock talk show with literary characters as the interviewed guests.

- Book trailer

Almost everybody has seen a movie trailer that made them really want to see the movie. Create a similar trailer for the book you read. There are many choices for free video editing software—including WeVideo, Windows Movie Maker, and iMovie—that you can use to create transitions, add special effects, edit out mistakes, and add audio.

- Book club questions

Some books have a section in the back with questions for facilitating discussion at a book club. In this vein, write a section of discussion questions for the book you read. Remember that discussion questions don't have an easy answer. Instead, they should enable people to express their own perspectives while answering the question. There should be at least 10 thought-provoking questions.

- Podcast

Create a podcast relating to your book. You could podcast from the perspective of a character or retell the book's story in a series of short episodes. You can easily record the audio for your podcast on a computer or smartphone. You can also use a free sound editing program—such as Audacity or GarageBand—to edit your recording. If you aren't

familiar with podcasts, listen to podcasts such as Youth Radio and StoryCorps before creating your own.

- Comic strip or picture book

Condense the book you read into a comic strip/graphic novel or a picture book. Tell the whole story in the new format, not just one section of the book. You could read your book to younger students.

- Alternate ending

Have you ever loved a book, but wished it ended differently? Try rewriting the ending of the book you read. Then, explain why you made the change you did.

- Sequel pitch

Sometimes a book is so good, you just don't want to say goodbye to its characters. Pitch an idea for a sequel to the book you read as if you were speaking to the editor. Include a basic outline of the plot, any new characters, and an explanation of why the book deserves a sequel. Then, write the first chapter of the sequel.

- Another point of view

Point of view is a key literary device. Retell a part of the book you read from a different point of view. You may choose to use first-person point of view or third-person narration to switch to the perspective of a different character.

- Board game

Create a board game about the book you read. For example, the game could advance players when they answer a question about the book or move players backward or forward based on problems and solutions from the book.

- Website for the book

Create a website for the book. Include pages for the characters, plot, and key elements of the story. Make sure to include student-created graphics. You can use a free website builder such as Google Sites and send the link when school begins.