

Dear Parents and Guardians,

This summer, students are expected to complete the **End-of-Year Test** as their Summer Math Assignment.

Purpose of the Assignment

- Review and reinforce the math skills learned this year.
- Prevent summer learning loss. Studies show that students who do no academic work over the summer can lose up to 40% of their academic gains from the school year.
- Prepare students for the expectations of next year's math course.
- Identify areas that may need additional practice.

How to Complete the Assignment

- Work independently and show all steps in solving problems.
- Take time to carefully solve and check each problem.
- Focus on understanding the process, not just finding the answer.
- Complete the assessment over multiple sessions rather than all at once.

Resources for Support

If a problem is difficult, students should refer to:

- Class notes and study guides.
- Online resources such as Khan Academy (www.khanacademy.org) or IXL.
- YouTube videos. We recommend Math With Mr. J, Mathantics, and Doodles and Digits: Educational Math Videos.

When to Complete the Assignment

- Complete the assessment during the summer.
- Have it ready to submit on the first day of school.

Math Fact Fluency

- Students are expected to have mastered the basic math facts taught in previous grades, including addition, subtraction, multiplication, and division. Fluency with these facts is essential for success in higher-level mathematics. Families are encouraged to review math facts regularly throughout the summer to help students maintain these important skills.

Thank you for supporting your child's continued mathematical growth. Consistent practice over the summer will help ensure a strong start to the new school year.

Sincerely,

The Math Department

Holy Spirit School

Give the best answer for each question.

1. Match each multiplication expression with its product.

7×9	12
5×4	63
3×4	42
5×5	25
6×7	20

2. What number makes each equation true?

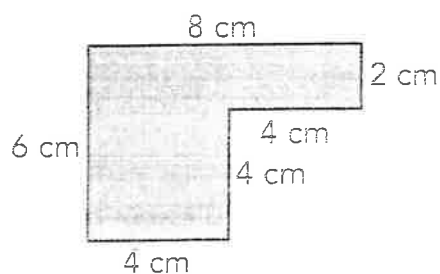
$$\underline{\hspace{2cm}} \times 6 = 54$$

$$6 \times \underline{\hspace{2cm}} = 54$$

$$54 \div \underline{\hspace{2cm}} = 6$$

$$54 \div 6 = \underline{\hspace{2cm}}$$

3. What is the area of the figure?



- ☐ A 16 square cm
☐ B 24 square cm
☐ C 32 square cm
☐ D 48 square cm

4. Match each division expression with its quotient.

$45 \div 5$	3
$27 \div 9$	6
$36 \div 6$	7
$63 \div 9$	8
$24 \div 3$	9

5. Twenty children go on a trip in 5 cars. Each car takes the same number of children. How many children ride in each car?

_____ children

6. There are 9 shelves on the wall. There are 5 trophies on each shelf. Make an array to represent the situation.

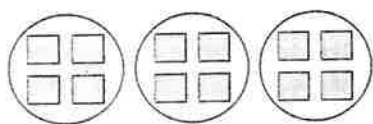
How many trophies are there altogether on the shelves?

_____ trophies

7. Add.

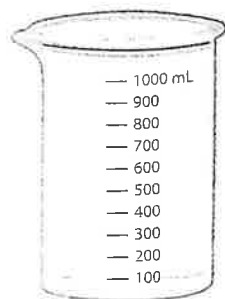
$$\begin{array}{r} 576 \\ + 188 \\ \hline \end{array}$$

8. What is a division equation for the model?



What is a related multiplication equation for the division equation you wrote?

9. Charlie pours the water in the beaker into 10 test tubes. He pours the same amount into each test tube.



How much water does Charlie pour into each test tube?

10. Each team has 20 players. How many players are on 5 teams?

- ☐ 80 players ☐ 100 players
☐ 120 players ☐ 140 players

11. Which multiplication equations are true?

Select **all** that apply.

- ☐ $9 \times 1 = 9$
☐ $0 \times 6 = 6$
☐ $1 \times 1 = 1$
☐ $5 \times (3 + 2) = (5 \times 3) + (5 \times 2)$
☐ $1 \times 5 = 0$
☐ $3 \times 9 = 9 \times 3$

12. Which statements are true?

Select **all** that apply.

- ☐ All squares are parallelograms.
☐ All rhombuses are quadrilaterals.
☐ All squares are rectangles.
☐ All parallelograms are rectangles.
☐ All parallelograms are rhombuses.

13. Jonah will leave to go to the library at 4:30. The clock shows the time now.

What time is it now? _____

In how many minutes will Jonah leave to go to the library?



He will leave in _____ minutes.

14. A concert costs \$6 for each adult ticket and \$4 for each senior ticket. A family buys 3 adult tickets and 1 senior ticket. How much does the family spend on tickets? Explain.

15. Len makes 368 birthday cards. He also makes 212 thank-you cards. He sells 487 of the cards he makes. How many of the cards does Len not sell?

Len does not sell _____ cards.

How can you use rounding to check that your answer is reasonable?

16. What is an equivalent addition equation for $2 \times 6 = 12$?

17. Part A

What is 753 rounded to the nearest ten?

- ☐ 700 ☐ 750
☐ 760 ☐ 800

Part B

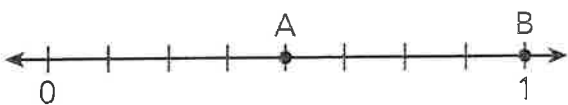
What is 753 rounded to the nearest hundred?

- ☐ 700 ☐ 750
☐ 760 ☐ 800

18. Part A

Which fractions are equivalent to the fraction modeled by Point A on the number line?

Select **all** that apply.



- ☐ $\frac{2}{6}$ ☐ $\frac{3}{6}$
☐ $\frac{1}{2}$ ☐ $\frac{2}{4}$

Part B

Which fraction is modeled by Point B on the number line?

- ☐ $\frac{1}{8}$ ☐ $\frac{8}{8}$
☐ $\frac{3}{8}$ ☐ $\frac{7}{8}$

Name _____

Date _____

END-OF-YEAR

TEST

19. Use the table.

×	0	1	2	3	4	5	6
0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6
2	0	2	4	6	8	10	12
3	0	3	6	9	12	15	18
4	0	4	8	12	16	20	24
5	0	5	10	15	20	25	30
6	0	6	12	18	24	30	36

Part A

What pattern do you see when multiplying two even numbers?

An even number times an even number is _____.

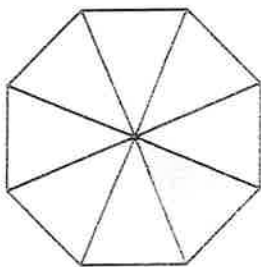
Part B

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

An even number times an odd number is _____.

20. **Part A**

Which fraction represents the shaded part?



$\frac{1}{3}$

$\frac{1}{5}$

$\frac{1}{4}$

$\frac{1}{8}$

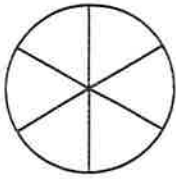
Part B

Use the number line to model the fraction you named.



21. Part A

Use the circle to model the fraction $\frac{4}{6}$.

**Part B**

Use the number line to model the fraction $\frac{4}{6}$.



- 22.** Lucy counts 15 rainy days in September, 9 rainy days in October, and 3 rainy days in November.

Part A

Use Lucy's data to complete the picture graph.

Rainy Days	
September	
October	
November	
Each = 3 rainy days.	

Part B

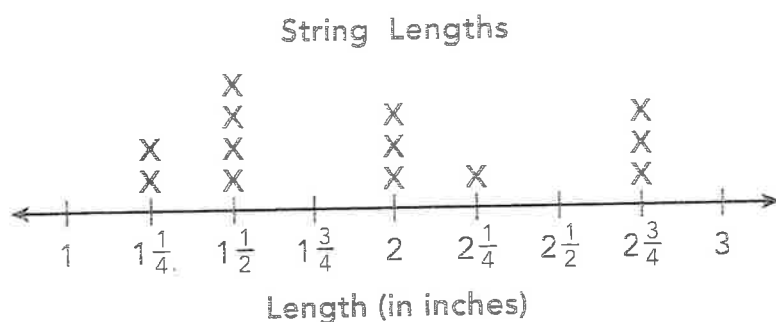
What scale would you choose for a bar graph that shows the data about rainy days? Explain.

23. Meg cuts a pizza into 8 equal pieces. Her friends eat 6 pieces. Meg eats the rest. What fraction of the pizza does Meg eat?

Meg eats _____ of the pizza.

Explain how you got your answer.

24. The line plot shows the lengths (in inches) of some pieces of string.



Part A

The length of this piece of string is not included on the line plot. Measure the piece of string to the nearest quarter inch.

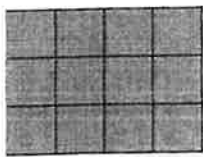


_____ inches

Part B

How will the line plot change if you include the length you measured in part A?

25. In the figure, the area of each small square is 1 square unit.



Part A

What is the area of the figure?

Part B

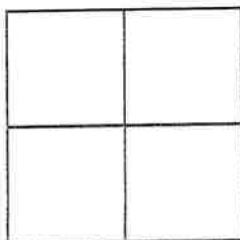
What is the perimeter of the figure?

26. Eva and Fran each draw a square. The squares are the same size. Each girl divides her square into four smaller squares that are the same size.

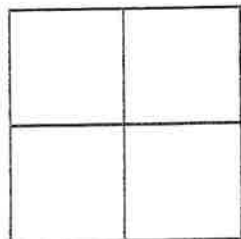
Part A

Eva shades 3 smaller squares in her drawing.
Fran shades 1 smaller square in her drawing.
Show how each girl shades her drawing.

Eva's Drawing



Fran's Drawing



Part B

Which girl shades a greater fraction of the area of her square? Explain.

27. Part ACompare. Use $>$ or $<$.

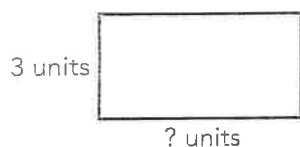
$$\frac{5}{6} \text{ — } \frac{5}{8}$$

Part B

Explain your answer.

28. Part A

The perimeter of the rectangle is 18 units.
Find the length of the rectangle. Then find the area.

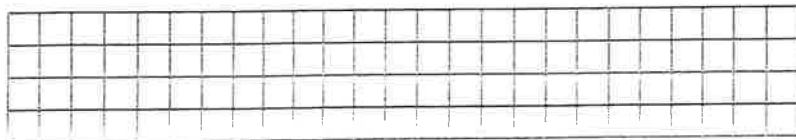


Length: _____

Area: _____

Part B

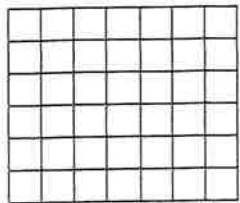
Draw a rectangle with whole number side lengths that has the same area but a different perimeter than the rectangle in Part A.



What is the perimeter of your rectangle?

Perimeter: _____

29. Liz and Janet draw a rectangle. In their drawing, each small square is 1 square inch. Liz and Janet write two different equations to find the area.



Liz's equation: $6 \times 7 = (4 \times 7) + (2 \times 7)$

Janet's equation: $6 \times 7 = (3 \times 7) + (3 \times 7)$

Part A

What property are Liz and Janet using?

They are using the _____ Property.

Part B

What is the area of the rectangle?

Area = _____

30. Pablo wants to make a picture frame.
The picture frame will be shaped like a trapezoid.

Part A

How many right angles could the picture frame have?

Select **all** that apply.

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4

Part B

Draw examples to support your answer to Part A.

