

Math Summer Assignment for students going into Grade 7

June 2026

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 or IXL.

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

Name _____ Date _____

Give the best answer for each question.

1. Dave is making pans of lasagna for a banquet. For each pan, he needs $\frac{5}{6}$ pound of cheese.

If Dave has $5\frac{5}{8}$ pounds of cheese, how many complete pans of lasagna can he make?

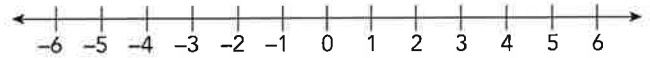
Dave can make _____ complete pans of lasagna.

2. Evaluate the expression at the given values.

$$f = 5\frac{2}{3}, g = \frac{3}{4}$$

$$f - 2\frac{1}{3} + g = \underline{\hspace{2cm}}$$

3. Put the numbers in order from least to greatest. Use the number line to help.



$$-\frac{6}{2}, -0.5, -2\frac{1}{4}$$

4. Point A is located at $(-3, 6.5)$.
Point B is located at $(-3, -6.5)$.

Which statement correctly compares the two points?

- ☐ Point A is a reflection of point B over the x-axis.
- ☐ Point A is a reflection of point B over the y-axis.
- ☐ Point A is a reflection of point B over the x-axis and the y-axis.
- ☐ Point A is not a reflection of point B over either axis or both axes.

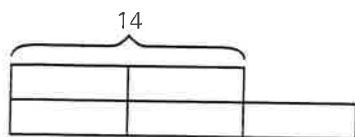
5. Allison has a metal nut in the shape of a regular hexagon with a hole cut out of the center, as shown. The hexagon has side lengths of 5 millimeters and measures 8.66 millimeters from side to side. The circular hole in the center has a diameter of 5 millimeters.



What is the area of this face of the metal nut? Round to the nearest hundredth. (Use $\pi \approx 3.14$.)

_____ square millimeters

6. Emilio has a photo that is 2 inches wide and 3 inches long. He enlarges it so that it is 14 inches wide and has the same ratio of width to length. How long is the enlarged photo?



- ☐ 9 in.
☐ 12 in.
☐ 18 in.
☐ 21 in.

7. Use the tables to compare. Which ratio is greater?

4 : 9		
4	8	12
9	18	27

1 : 3		
1	2	3
3	6	9

- ☐ 4 : 9
☐ 1 : 3

8. A bakery has 12 pounds of flour. A loaf of bread uses 300 grams of flour. How many whole loaves of bread can the bakery make?

$$1 \text{ lb} = 16 \text{ oz}$$

$$1 \text{ oz} \approx 28.35 \text{ g}$$

_____ loaves of bread

9. The area of a parallelogram is 35 square inches, and the height is 7 inches. Find the length of the base.

_____ in.

10. A triangle and a trapezoid have the same area. The trapezoid has a height of 9.2 centimeters and base lengths of 4.4 and 7.5 centimeters. The triangle has a base length of 10.9 centimeters.

Find the area of both shapes, and the height of the triangle. Round your answers to the nearest hundredth.

Area of both shapes: _____ cm^2

Triangle height: _____ cm

11. Match each decimal or fraction in the left column with its equivalent percent in the right column.

0.0038

0.9%

$\frac{9}{4,000}$

$\frac{4}{5}\%$

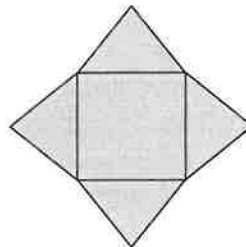
0.009

0.225%

$\frac{1}{125}$

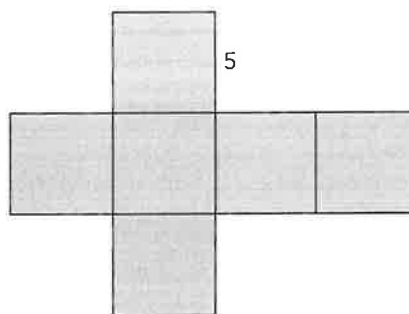
0.38%

12. A pyramid has a square base with side lengths of 8 millimeters and triangular faces with heights of 5 millimeters. What is the pyramid's surface area?



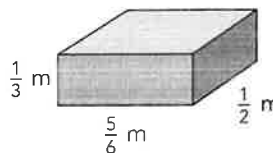
- ☐ 64 mm^2 ☐ 80 mm^2
☐ 144 mm^2 ☐ 224 mm^2

13. Find the surface area of the cube.



_____ square units

14. Find the volume of the rectangular prism.



Volume = _____ m^3

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

Note: Assume that no variables equal 0.

☐ $\frac{m}{n} \cdot \frac{m}{n} = 1$

☐ $\frac{12}{25}(1) = 1\frac{12}{25}$

☐ $\frac{7}{8}\left(\frac{1}{4} - \frac{1}{3}\right) = \frac{7}{8} \cdot \frac{1}{4} - \frac{7}{8} \cdot \frac{1}{3}$

☐ $b \cdot \frac{9}{10} = \frac{9}{10} \cdot b$

☐ $\left(\frac{2}{3} \cdot \frac{4}{5}\right)\frac{3}{5} = \frac{2}{3}\left(\frac{4}{5} \cdot \frac{3}{5}\right)$

☐ $\left(\frac{5}{6} \cdot \frac{3}{5}\right) + \frac{7}{10} = \frac{5}{6}\left(\frac{3}{5} + \frac{7}{10}\right)$

16. Jackson sells his skateboard for two thirds of the price he paid for it.

Part A

What expression represents Jackson's selling price for his skateboard? Let p represent the price he paid for it.

Part B

If Jackson paid \$72.75 for his skateboard, what is his selling price?

\$ _____

17. Part A

The cost of 5 plants is \$6. Each plant costs the same amount. How much does 1 plant cost?

\$ _____

Part B

Which of these prices offer a better deal than 5 plants for \$6?

Select **all** that apply.

2 plants for \$3

4 plants for \$5

6 plants for \$7

8 plants for \$10

10 plants for \$11

18. A dock is $3\frac{1}{2}$ feet above the surface of a lake. A fish is swimming 3.75 feet below the surface of the lake.

Part A

Plot points on the number line to show the positions of the dock and the fish relative to the lake's surface.

**Part B**

What is closer to the surface of the lake: the dock or the fish?

The _____ is closer.

Part C

Justify your answer to Part B.

19. Pattie has three rectangular vegetable gardens. Each garden has a length of 14 feet and a width of 12 feet. Pattie wants to know how much fencing she needs for all three gardens.

Part A

The total of the gardens' perimeters is represented by the formula shown.

$$P = (2\ell + 2w) + (2\ell + 2w) + (2\ell + 2w)$$

Rewrite the formula by using properties of operations to combine like terms.

$$P = \underline{\hspace{2cm}}$$

Part B

How many feet of fencing does Pattie need in all?

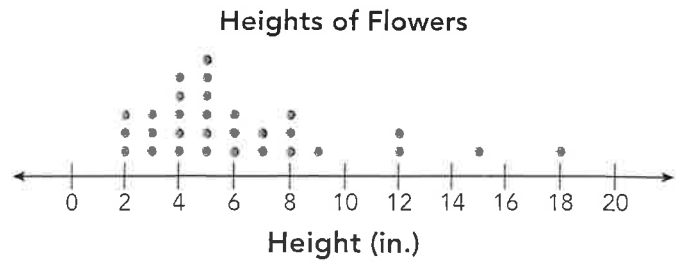
_____ feet

20. The dot plot shows the heights in inches of 30 flowers Thomas picked from his garden.

Part A

What is the mean height of the 30 flowers?

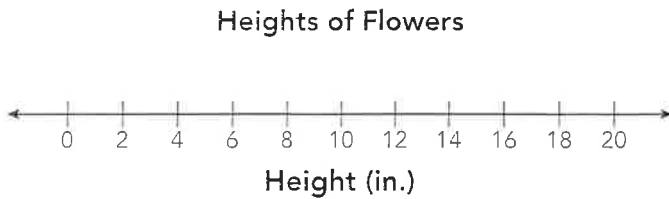
Round your answer to the nearest tenth of an inch.



_____ inches

Part B

Make a box plot to summarize the data in the dot plot.



21. There are 154 residents in Nestorville who own vans, representing about 3.6% of the town's population.

Part A

To the nearest whole, what is the population of Nestorville?

_____ residents

Part B

Out of the residents who own vans, about 37% own white vans. To the nearest whole, how many residents own white vans?

_____ residents

Part C

Raul and Daniel are the only two residents who own red vans. To the nearest tenth of a percent, what percent of the van-owning residents do Raul and Daniel represent?

_____ %

22. Matthias cuts a piece of paper so that it is $8\frac{1}{2}$ inches long and x inches wide. Its area is $45\frac{11}{16}$ square inches.

Part A

What is an equation that represents this situation? _____

Part B

How wide is the piece of paper? _____ in.

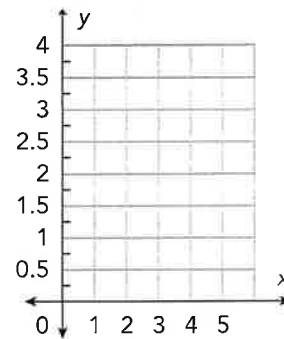
23. Each can of beans costs \$0.75. Let b equal the number of cans of beans and c equal the total cost.

Part A

Represent the relationship with an equation.

Part B

Represent the relationship in a graph.



24. Clifton's daily high temperatures for the past two weeks in degrees Fahrenheit, are:

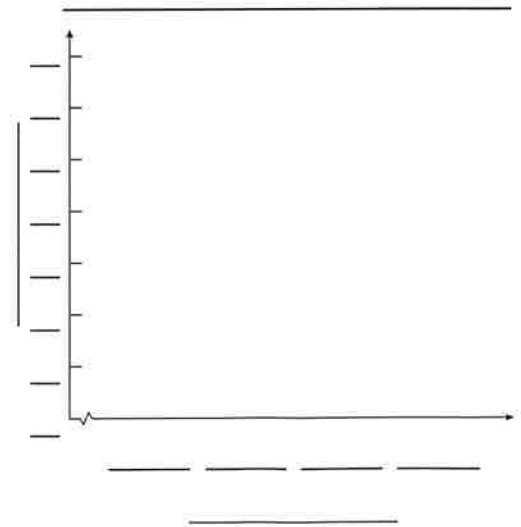
75, 72, 66, 65, 68, 70, 70,
62, 69, 68, 77, 71, 70, 72

Part A

Make a histogram of the data.

Part B

Can you use the histogram to find the mean, median, or mode of the data? Explain.



25. Part A

Koa counts 350 hatchling turtles among n nests. Each nest has the same number of hatchlings. Which expression could be used to find the number of hatchlings per nest?

- ☐ $350n$ ☐ $350 - n$ ☐ $\frac{n}{350}$ ☐ $350 \div n$

Part B

There are actually 2 more nests than Koa thought. Either way, the number of hatchlings per nest is a whole number if there are 350 hatchlings in all.

How many nests did Koa think there are?

_____ nests

What is the actual number of nests?

_____ nests

Explain how you know.

- 26.** Henry has \$2 more than Ray. If Ray has x dollars, then Henry has y dollars.

Part A

Write an equation for this situation.

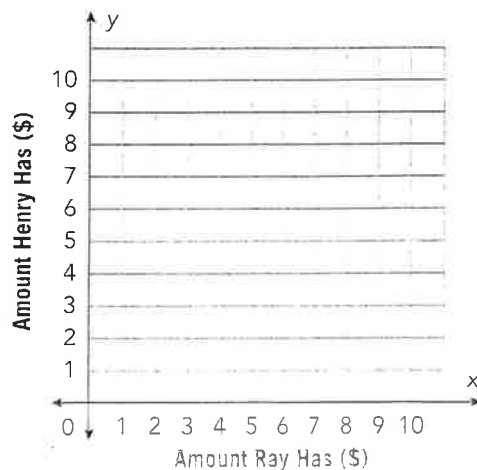
Part B

Graph the equation.

Part C

If Ray has \$10, how much money does Henry have?

Henry has \$_____.



- 27.** James is building a fence.

He puts posts at $(3, 1)$, $(3, -5)$, $(-2, 1)$, and $(-2, -5)$.

Part A

Plot the points.

Part B

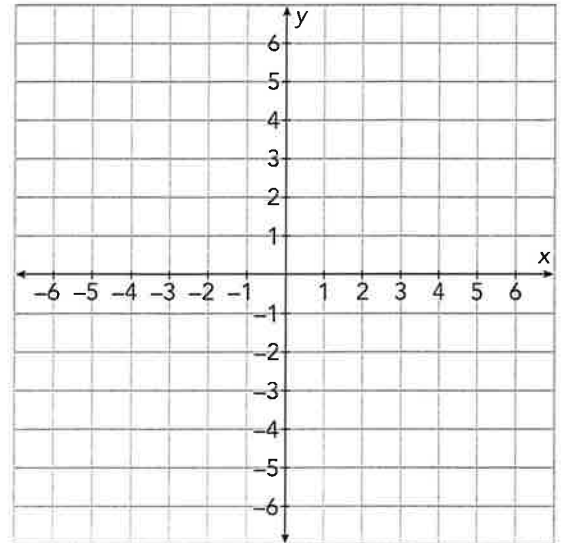
Assume each unit on the grid represents 3 meters. What is the length (the longer side) of the fence? What is the width?

Length: _____ m

Width: _____ m

Part C

James says that if he plots a fifth post anywhere, his fence will be pentagonal. Is he correct? Justify your response.



- 28.** Jenna lives 3 miles from school, which is 4 miles closer than her friend Maria lives.

Part A

If m represents the number of miles Maria lives from school, complete the equation.

$3 = \underline{\hspace{2cm}}$

Part B

Solve for m .

$m = \underline{\hspace{2cm}}$

29. The table shows results from a men's swim race.

Part A

What is the mean time among the 8 swimmers?
Round to the nearest hundredth.

_____ s

Part B

What is the median time among these swimmers?

_____ s

Part C

What is the interquartile range (IQR) of the times of the swimmers?

- ☐ 0.06 s ☐ 0.34 s ☐ 0.38 s ☐ 0.68 s

Top 50-m Freestyle Times (s)
21.40
21.41
21.49
21.68
21.74
21.79
21.79
22.08

30. Charles spends the same amount each day for lunch, 5 days per week. He spends a total of \$39.75 on lunch during those 5 days.

Part A

What is an equation that represents this situation? Let x equal the amount of money Charles spends on lunch each day.

Part B

How much does Charles spend on lunch each day?

\$ _____

Part C

Charles has \$200 budgeted for lunches. What inequality describes how many full weeks, w , he can buy lunch until he runs out of money? Assume he spends \$39.75 each week.

Part D

Graph the solution to the inequality from Part C.

