

Rising Grade 6

Math Summer Review Packet 2022 - 2023



NAME_____

Due On The First Day Of The School

*The problems in this packet are designed to help you review topics from previous mathematics courses that are essential to your success in Grade 6. You are expected to bring this completed packet to class on the first day of school. Please note that this packet will contribute to your first quarter grade, as you will be assessed on its content upon your return. The topics covered in the packet align with Grade 5 objectives. Neatly **SHOW YOUR WORK** for each question on this packet.*

Grade 5 Entering Grade 6 Summer Packet/2022-2023

Created By Heleena Veera

1 What is the value of this expression?

$$100 - [5 \times (3 + 4)]$$

Enter your answer in the box.

2 Evaluate:

$$8 \times 10^3$$

3 Solve using the order of operations: $2^2 + (9 - 3) \div 3 + 11 =$

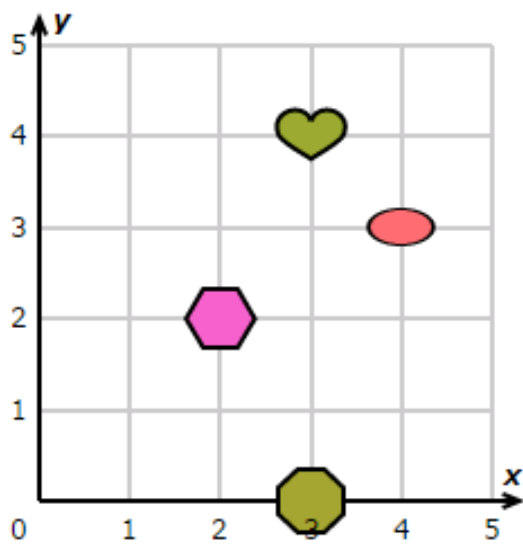
4 Which expression represents

“thirty-eight less than the sum of forty and nineteen” ?

- (A) $38 - 40 + 19$
 - (B) $38 - (40 - 19)$
 - (C) $19 + (40 - 38)$
 - (D) $(40 + 19) - 38$
-

(a)

Consider the graph shown below.



Which shape is at (2, 2)?

(A)



(B)



(C)



(D)



(b)

Part B

What are the coordinates of green heart?

(,)

6

What would be the next number in the following pattern? 12, 24, 36, 48, 60, ____

A 68

B 78

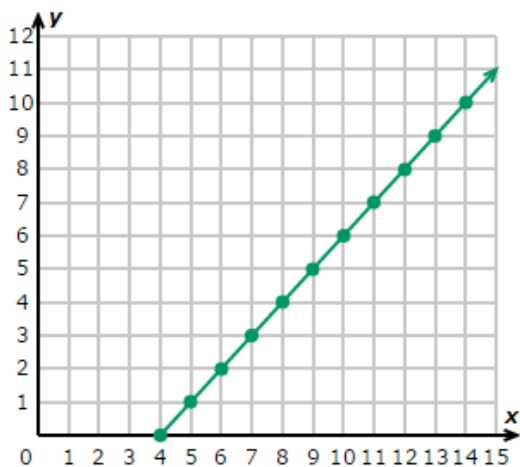
C 70

D 72

7

Preview: 5.G.A.2

Use the graph to complete the table of values.



x	y
1	3
8	4
11	2
3	11

8

A school district purchased 615 new laptops for their mobile labs. Each computer cost \$409. What is the total cost for all of the laptops?

9

Solve using the standard algorithm.

(a) $431 \times 12 =$

(b) $123 \times 23 =$

(c) $312 \times 32 =$

10

Enter the sum of $42.6 + 0.45 + 30.22$ in the space below.

11

Multiply:

$100 \times 0.64 =$

12

Mrs. Bell wrote the expanded form of a number, as shown.

$$5 \times 100 + 4 \times 10 + 6 \times 1 + 2 \times \left(\frac{1}{10}\right) + 8 \times \left(\frac{1}{1000}\right)$$

What is the number written in standard form?

Enter your answer in the box.

13

Clarke ran for 2.8 miles on Sunday, 2 miles on Monday and 3.7 miles on Tuesday. Total distance covered by Clarke is

miles.

14

Multiply:

$0.8 \times 0.5 =$

15

Evaluate the following expression.

$$0.965 \times 10^2 =$$

16

Scott had \$12.58.

- He purchased two apples for \$1.13 each and one bottle of juice for \$1.76.
- There was no sales tax.

How much money did Scott have after his purchases?

- (A) \$6.80
- (B) \$8.56
- (C) \$9.69
- (D) \$11.45

17

Ross bought a bag of carrots that weighed 8.6 pounds and a bag of strawberries that weighed 4.7 pounds.

How many pounds in all did Ross buy?

Answer:		pounds
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18

Simon and Sherry went blueberry picking.

Simon picked 18.5 pounds and Sherry picked 21.84 pounds.

Part A

How many pounds did Simon pick, rounded to the nearest whole number?

pounds

Part B

How many pounds did Sherry pick, rounded to the nearest tenth?

pounds

19

If each brick weighs 2.81 kilograms, then 15 bricks will weigh (in kilograms)?

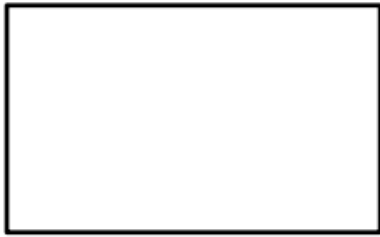
20

Jim uses ribbon to make bookmarks. Jim has 9 feet of ribbon. He uses $\frac{1}{3}$ foot of ribbon to make each bookmark. What is the total number of bookmarks Jim makes with all 9 feet of ribbon?

Enter your answer in the box.

21

Find the area of the rectangle:

 $3\frac{1}{3}$ ft. $2\frac{2}{5}$ ft.

square feet

22

Mr. Blaylock ordered a pizza. He ate $\frac{3}{8}$ of the pizza. Bailey decided to eat some pizza. She ate $\frac{1}{4}$ of the pizza. How much pizza did they eat altogether?

23

Find the product. Write your answer as a whole number.

$$3\frac{1}{5} \times 2\frac{2}{4}$$

24

I can solve word problems by adding mixed fractions with unlike denominators.

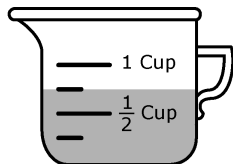
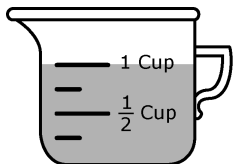
N.NF.2

Michael bought $3\frac{3}{4}$ pounds of apples at the Chankla Store. Joseph bought $2\frac{1}{8}$ pounds of apples. How many pounds of apples did Michael and Joseph buy?

They bought pounds of apples altogether.

25

A recipe says that $1\frac{3}{4}$ cups of baking soda are needed to make 1 batch of a homemade cleaning product, as represented below.



How many total cups of baking soda are needed to make $2\frac{1}{2}$ batches of the cleaning product?

Show all work needed to find your answer.

cups of baking soda are needed.

26

Xavier read a magazine article in 12.5 minutes. It took his brother $2\frac{1}{2}$ times as long to read the same article. How long, in minutes, did it take his brother to read the article? Use paper to model the problem with a tape diagram. Express your answer as a decimal in the box below.

It took Xavier's brother minutes to read the magazine article.

27

Part A

(a)

A group of hikers buys 8 bags of mixed nuts. Each bag contains $3\frac{1}{2}$ cups of mixed nuts. The mixed nuts are shared evenly among 12 hikers. How many cups of mixed nuts will each hiker receive? Show your work or explain your answer. Enter your answer and your work or explanation in the space provided.

(b)

Part B

The hikers plan to visit a scenic lookout. They will rest after they hike 2 miles. Then they will hike the remaining $1\frac{3}{4}$ miles to the lookout. The trail the hikers will use to return from the lookout is $\frac{1}{2}$ mile shorter than the trail they will use to go to the lookout. Each hiker will bring $\frac{1}{4}$ gallon of water for each mile to and from the lookout.

- Determine the total distance, in miles, each hiker will hike. Show your work or explain your answer.
- Determine the total number of gallons of water each hiker will bring. Show your work or explain your answer.

Enter your answers and your work or explanations in the space provided.

28

David biked $12\frac{7}{8}$ miles on Tuesday and $5\frac{3}{8}$ miles on Wednesday.

How much farther did David bike on Tuesday than on Wednesday?

miles

29

In a three person race, the first team member must run $3\frac{1}{2}$ laps, the second team member must run $5\frac{3}{4}$ laps, and the third team member must run $2\frac{1}{5}$ laps.

How many total laps will each team run? Express your answer as a mixed number.

laps

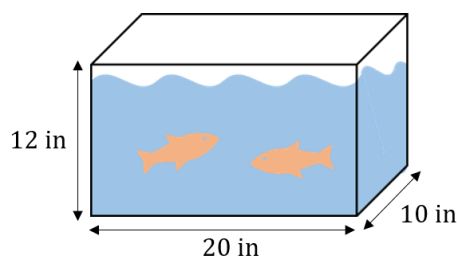
30

Gavin and Ethan are training for a race. Last week, Gavin ran 7 kilometers, and Ethan ran twice as far as Gavin. What is the total distance that Gavin and Ethan ran last week? Express your answer in meters. Hint: answer should be the distance they both ran. This is a multistep problem.) Gavin ran 7 Kilometers. Ethan ran twice as fas as Gavin.) Then convert that answer into meters

The total distance that Gavin and Ethan ran last week is meters.

31

An aquarium is 20 inches long, 10 inches wide, and 12 inches tall. What is the volume of the aquarium?
Use paper to show your work. Enter your answer in the box.



The volume of the aquarium is cubic inches.

32

Tom has a water tank that holds 5 gallons of water.

Part A

Tom uses water from a full tank to fill 6 bottles that each hold 16 ounces and a pitcher that holds $\frac{1}{2}$ gallon.

How many ounces of water are left in the water tank?

Enter your answer in the box.

Part B

Tom drinks 4 pints of water a day.

How many full tanks of water will he drink in 30 days?

Enter your answer in the box.

33

Ms. Lang told her class that the class's pet hamster is $\frac{1}{4}$ feet in length. How long is the hamster in inches? Explain your answer with words and numbers. Use your rubric.

34

Ms. Martin's classroom has lockers for the students to store their things.

The volume of the lockers is 40 ft^3 .

If the base is 4 feet by 2 feet, how tall are the lockers?

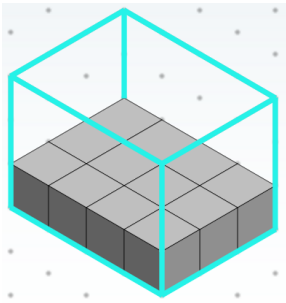
 feet

35

Rachael was filling the box below with unit cubes.

The box has a volume of 36 units^3 .

Rachael has already completed one layer.



How many total layers will there be in the box after Rachael has completely filled it?

 layers

36 The chart shows the distance that students live from school.

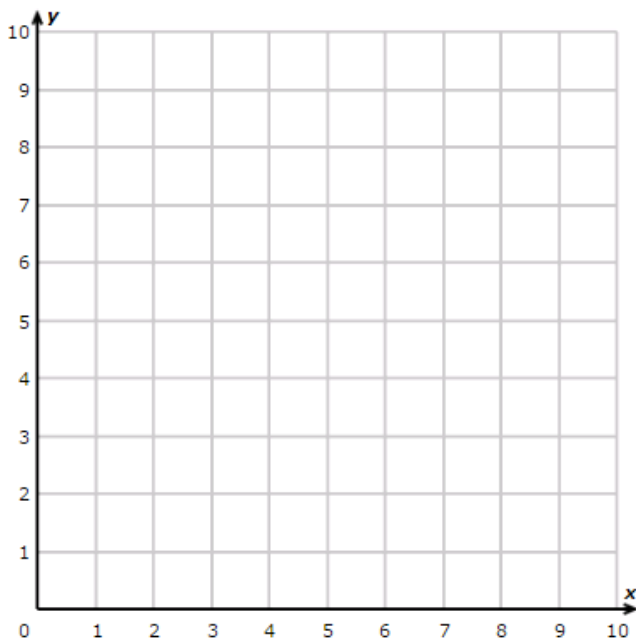
Student	Distance
Sam	7.5 miles
Andy	21,210 feet
Leslie	14,080 yards
Jordan	47,520 feet

Which student lives the longest distance from the school?

- ☐ A Sam
- ☐ B Andy
- ☐ C Leslie
- ☐ D Jordan

37 Use the graph below for the problem.

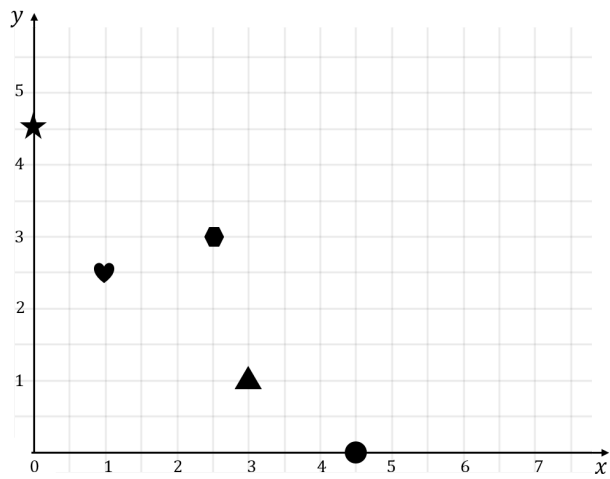
If Tom started at $(3, 10)$, and then he moved left 1 unit and down 3 units, where did he end up?



Write the answer as a coordinate in parentheses.

Use the coordinate plane shown to complete the table and answer the questions.

Drag a number or word to each box.



DRAG & DROP THE ANSWER

0

1

2

$2\frac{1}{2}$

3

4

$4\frac{1}{2}$

Circle

Heart

Hexagon

Star

Triangle

a. Complete the table.

<i>x</i> -coordinate	<i>y</i> -coordinate	Shape
	0	
1		
3		
	3	
0		

39 The length of one edge of a cube is 3 units. What is the volume of this cube in cubic units?

b. Which shape is 3 units from the *x*-axis?

40 Mr. Yates walks around the perimeter of a square playground every day for exercise. Each side of the playground is 29 yards long.
What is the perimeter of the playground in yards?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

41 A rectangular billboard is 9.35 meters wide and 6.82 meters tall. What is the perimeter of the billboard in meters?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

42 A manager purchased a total of 21 coffee mugs and key chains. Each coffee mug cost \$8.50, and each key chain cost \$2.75. If the manager spent a total of \$132.50, how many coffee mugs did the manager purchase?

 coffee mugs

43

Mary began a job that gives her 3 days of vacation each year she is employed, up to a maximum of 24 days. How many years will she have to work for the company until she reaches the maximum amount of vacation time?

 years

Boxes of Clay**Boxes of Clay**

Mrs. Hawkins bought 6 boxes of clay for an project. Each box weighs 17.4 ounces.



44

How many ounces of clay did the teacher buy?

- (A) 115.7 ounces
- (B) 98.84 ounces
- (C) 104.4 ounces
- (D) 106.2 ounces

45

If the clay is shared equally among the 18 students in the class, how many ounces of clay will each student get?

46

After her students begin the project, Mrs. Hawkins realizes that each student needs 8.7 ounces of clay. How many more boxes of clay does she need to buy? Explain your answer using words, numbers, and/or symbols.

47

Croakie now has a new routine that is 59 feet long. In his new routine, Croakie makes seven super jumps, all the same length, and then hops 3 feet. How long is each super jump?

48

Jason has $4\frac{1}{2}$ yards of fabric. How many bandannas can he make if each one requires $\frac{3}{4}$ yard of fabric?

(A) 6

(B) 7

(C) 8

(D) 9

49

Data: 37, 45, 50, 35, 41, 43, 54, 41, 38, 46
Find the mean of the data listed above.

(A) 10

(B) 41.5

(C) 42

(D) 43.5

50

The amount of money that has been budgeted for food is \$12.75 per person per day. If the same amount is spent on each of three meals, how much will be spent at each meal?

\$

51

Mr. Jones will cut 6 identical loaves of bread into pieces that are $\frac{1}{4}$ loaf each.

Part A

After he cuts the 6 loaves, how many pieces will Mr. Jones have? Show your work using numbers, words, and/or pictures.

pieces

Part B

Mr. Jones will sell $\frac{2}{3}$ of the pieces that he cut in *Part A*. How many pieces of bread will Mr. Jones sell?

pieces

a) Triple the sum of twelve and five.

b) The difference of forty-seven and twenty-nine.

c) Twice the product of five and twelve.

d) The quotient of ninety-seven and thirteen.

53

At a convenience store Darren purchased a bag of chips for \$1.89 and a candy bar for \$0.95 including tax.

If Darren paid with a \$20 bill, how much change did he receive?

54

Franklin has a bag of 24 gumballs. There are red, blue, and green gumballs.

- $\frac{3}{8}$ of the gumballs are red.
- $\frac{5}{12}$ of the gumballs are blue.

How many of the gumballs in Franklin's bag are green?

55

Ginny has 16 chocolate bars. She gives away $\frac{3}{4}$ of her chocolate bars to friends. How many chocolate bars did Ginny give away?

56

If 3 feet = 1 yard, what is the length in feet of a wooden board that measures 3 yard and 1 foot?

 feet

57

Find the Mean, Median, Mode and Range for the set of numbers below.

5, 7, 2, 7, 9, 6, 8, 4

Mean =

Median =

Mode =

Range =

58

Write the equivalent measures for the following.

- a. A soccer goal measures 2.44 meters wide. Express this width in centimeters.

2.44 meters = centimeters

- b. From wheels to roof, most school buses are about 324 centimeters high. Express this length in meters.

324 centimeters = meters

59

It usually takes James $1\frac{3}{4}$ hours to get to his grandmothers house. Due to traffic, it took him $3\frac{1}{3}$ hours this time. How much longer did it take this time?

60

Brandon is on the track team. Below are three of his times for the 200 meter dash.

18.05 sec, 17.99 sec, 18.34 sec

What is the difference between his best time and his worst time?

Remember in a race the smaller the time the better you did.

