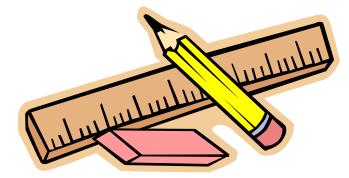
**Bridgeport Public Schools** 

## **Mathematics Department**

# Summer Math Packet For students entering sixth grade



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School:			
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Record your answers in this packet and return on the third day of school,

September 6, 2016.

#### Parents,

This 'Summer Math Packet' was prepared to enhance your child's mathematics skills over the summer months and to ensure his/her success in the upcoming school year. The open-ended activities involve both skill development and problem solving. While most students should be able to complete the problems independently, some students may need your help in developing a work plan and in managing their time. Students are expected to complete the entire packet and return it to their school on the third day of school, September 6, 2016.

## Students,

The purpose of this 'Summer Math Packet' is to give you a chance to practice some of the concepts you learned this past year in preparation for the upcoming school year. You must complete this packet to the best of your ability. This packet will be collected by your teacher on the third day of school.

Here are some helpful hints that will help you complete this packet:

- Show all work on each problem. When problems ask you to explain, be sure to write your answer using complete sentences, not just a few words.
- Do a little of your 'Summer Math Packet' each day. You are not expected to do it all on the first day.
- Try your best to solve every problem. If you need help, ask an adult or a friend, or visit some of the websites listed at the end of this packet.

Thank you and enjoy your summer.

Ricardo Rosa Director of Mathematics Bridgeport Public Schools

## Summer Math Packet for Students Entering Sixth Grade

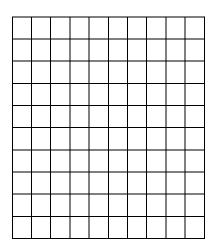
1. Charles collected cans to be recycled. The first week he collected 346 cans. The following week he collected 100 LESS cans. How many cans did Charles collect in the second week?

- a. 446 c. 146
- b. 246 d. 466

2. Which of these is equivalent to 6000 + 500 + 2

- a. 6,052 c. 6,502
- b. 65,002 d. 652
- 3. Which sum has the value of 5230?
- a. 5 thousands + 2 hundreds + 30 ones
- b. 5 thousands + 2 hundreds + 30 tens
- c. 5 thousands + 2 hundreds + 3 ones
- d. 5 hundreds + 2 tens + 3 ones
- 4. Which means the same as 4500?
- a. 45 thousands c. 45 hundreds
- b. 45 tens d. 45 ones
- 5. In which number does 7 have the least value?
- a. 7,683 c. 6,738
- b. 3,867 d. 8,736

6. Shade in 0.73.



7. Shade  $\frac{5}{8}$  of the rectangle.

## 8. What decimal number is represented by the shaded part?

## a. 0.28 b. 0.30 c. 0.32 d. 0.34

9. Shade <sup>3</sup>/<sub>4</sub> of the circle.



10. Kelly swam in 6 of her 8 swimming meets. Which of the following is another way to describe this?

a. Kelly swam in ¼ of the meets.

c. Kelly swam in  $\frac{3}{4}$  of the meets.

b. Kelly swam in ¼ of the meets.

d. Kelly swam in  $\frac{1}{2}$  of the meets.

11. Which mixed number is equivalent to 24/9?

- a. 2 4/9 c. 2 7/9
- b. 2 2/3 d. 3 2/3

12. Bill is studying the heights of trees. He made a chart to show their heights.

TREE	HEIGHT (in centimeters)
Maple	45,367
Oak	44,988
Elm	46,578
Sycamore	45,768

Which shows the heights of the trees arranged from TALLEST to SHORTEST?

- a. Maple, Sycamore, Oak, Elm,
- b. Sycamore, Oak, Elm, Maple
- c. Oak, Maples, Elm, Sycamore
- d. Elm, Sycamore, Maple, Oak

13. The chart shows the heights of some of Tina's friends.

FRIEND	HEIGHT (in feet)
Bob	5 3/4
Kevin	5 7/8
Sam	5 1/2
Ralph	5 1/4

Which one of Tina's friends is the SHORTEST?

- a. Bob c. Kevin
- b. Sam d. Ralph

14. If Paul collected between 3300 and 4700 stamps for his collection, which could be the amount collected?

- a. 3274 c. 4770
- b. 3628 d. 3299

15. Which of the following would be the height of the tallest building?a. 70  $\frac{1}{2}$  ft.b. 70  $\frac{7}{8}$  ft.c. 70  $\frac{3}{4}$  ft.d. 70  $\frac{5}{8}$  ft.

16. There were 6,789 people at a game. This number is ABOUT

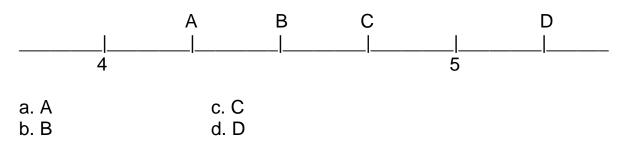
a. 6,000 c. 7,000 b. 8,000 d. 9,000

0. 0,000

17. Joe bought 4.3 pounds of beef. This amount rounded to the NEAREST whole number is

a. 3	c. 4
b. 5	d. 6

18. Which letter represents 4 1/4?



19. During inventory a bookstore counted 14 boxes of books. Each box had 12 books. What phrase could be used to find out how many books there were in all of the boxes?

a. Add 14 and 12

- b. Subtract 14 and 12
- c. Multiply 14 by 12
- d. Divide 14 by 12

20. There are 18 classes of sixth graders going to the library. Each class has 20 students. Write a number sentence to show how you would solve this problem.

21. Solve this problem.  $81 \div 9 =$ 22. \$123.45 + \$76.89 23. Multiply \$40.00 x 10 a. \$ 40.00 c. \$400.00 d. \$4.00 24. Solve this problem.

b. \$ 4000.00

 $7.95 \times 5 =$ 

25. Solve this problem. 2/8 + 5/8 =

26. Bob bought 18 gallons of gasoline. Each gallon cost \$3.50. How much did the gasoline cost in total?

27. A dozen tickets to the Hillary Duff concert cost \$132.00. If each ticket cost the same amount, what was the cost of a single ticket?

28. Joy needs to multiply 645 by 67,965. Which of the following would be BEST for Joy to use to ESTIMATE the product? a. 600 x 70,000 b. 700 x 70,000 c. 600 x 60,000 d. 700 x 60,000

29. To estimate the product of 672 and 583, Kevin used 700 x 600. Will Kevin's estimate be MORE or LESS than the actual amount?

a. More, because he rounded both numbers up.

b. Less, because he rounded both numbers up.

c. More, because he rounded both numbers down.

d. Less, because he rounded both numbers down.

30. Maria jogged 39  $\frac{1}{2}$  miles in one week and 28  $\frac{3}{4}$  miles in the second week. ABOUT how many miles did she jog during those two weeks?

a. A little more than 60 miles

b. A little less than 60 miles

c. A little more than 70 miles

d. A little less than 70 miles

31. Ashley's softball practice started at 4:15 p.m. It ended at 6:30 p.m. How long was the practice?

a. 1 hour 30 minutes

s c. 2 hours 15 minutes

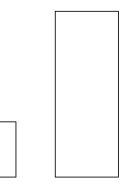
b. 1 hour 45 minutes d. 2 hours 30 minutes

32. Bill practices piano 40 minutes each day. How many hours does he spend practicing piano in one week?

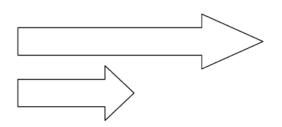
a. 3 hours 20 minutes c. 3 hours 40 minutes

b. 4 hours 20 minutes d. 4 hours 40 minutes

33. If the height of the shorter rectangle is about 4 feet, the height of the taller rectangle is about \_\_\_\_\_.



a. 3 feet b. 6 feet c. 12 feet d. 24 feet 34. If the length of the longer arrow is 18 centimeters, the length of the shorter arrow is \_\_\_\_\_.



a. 15 centimetersc. 9 centimetersb. 20 centimetersd. 3 centimeters

35. The length of line segment AB to the nearest quarter-inch is

Α	B
a. 2 inches	c. 2 ¼ inches
b. 2 1/2 inches	d. 2 ¾ inches

36. The length of line segment CD the nearest half-centimeter is

C	D
a. 5 centimeters	c.6 centimeters
b. 5 1/2 centimeters	d. 6 1/2 centimeters

37. Use your ruler to measure the lengths of each side of this triangle in centimeters. Label the lengths of the sides and determine the PERIMETER of the triangle.

Perimeter: \_\_\_\_\_

38. Use your ruler to measure the lengths of each side of this rectangle in inches. Label the lengths and determine the AREA of the rectangle.

	Area:	
	Area	

39. Which unit is **best** to use for measuring the weight of a truck?

- a. feet c. pounds
- b. ounces d. tons

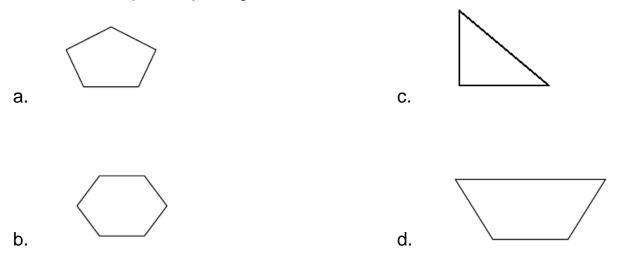
40. Which unit is **best** to use for measuring the length of a football field?

- a. inches c. centimeters
- b. yards d. grams
- 41. A book weighs 3.5 kilograms. How many grams is that?
- a. 305 grams c. 350 grams
- b. 3500 grams d. 3050 grams

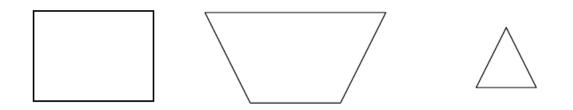
42. The Smith family drank 14 quarts of milk in one week. How many gallons is that?

- a. 3 gallons c. 3.25 gallons
- b. 3.40 gallons d. 3.50 gallons

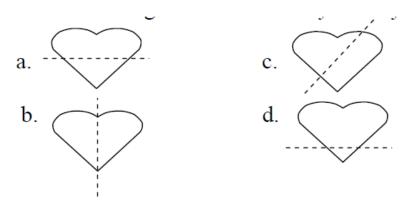
43. Which shape is a pentagon?



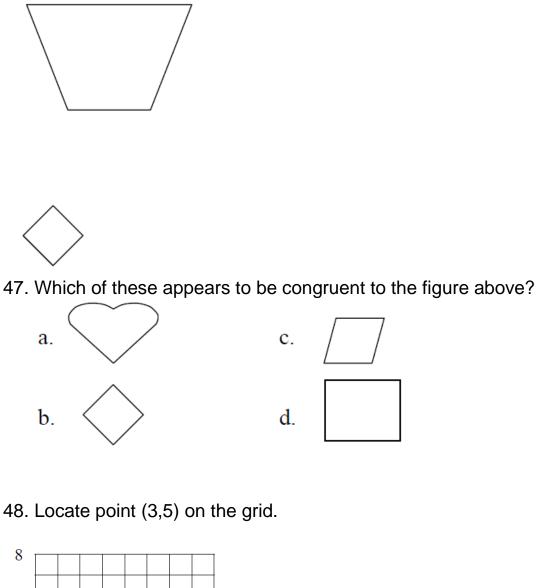
44. Draw a triangle inside a rectangle.

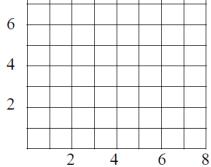


45. Which of the following shows a line of symmetry?



46. Draw a line of symmetry on the figure below.





49. The table shows the number of miles traveled by sixth graders during the summer vacation.

SIXTH GRADER	NUMBER OF MILES
Peter	353
Renee	629
Donafer	711
Liz	299
Jack	821

### Miles Traveled by Sixth Graders

Who traveled ABOUT twice as many miles as Peter?

	C. Donaic
b. Liz	d. Jack

50. The table below shows the number of books read by four sixth graders during the summer vacation.

## **Books Read By Sixth Graders**

Sixth Grader	Number Of Books
Raul	12
Pete	9
Sue	11
Felicia	15

Draw a bar graph to show the same information. Remember to label the axes and include a title. Do not **shade** the bars.

51. The table below shows the number of hamburgers eaten by sixth graders during the summer vacation.

Sixth Grader	Number Of Hamburgers
Tom	23
Juan	19
Karina	17
Anna	26

## Hamburgers Eaten By Sixth Graders

Draw a pictograph that shows the same information. Remember to include a title and a key.

52. This table shows the AVERAGE number of customers who get ice cream at Carvel's for each day of the week.

DAY	Average Number
	of Customers
Monday	193
Tuesday	184
Wednesday	189
Thursday	177
Friday	247

The owner needs to decide which day of the week is the best to schedule an extra person to work. Based on the data, which day would be BEST for the owner to schedule the extra person?

- a) Tuesday c) Wednesday
- b) Thursday d) Friday

53. This table shows the number of foul shots made by five members of a basketball team.

PLAYER	NUMBER OF	
	FOUL SHOTS	
Ben	23	
Pedro	31	
John	79	
Marcus	42	
Josh	35	

The coach needs to choose a player to take foul shots because of a technical foul. He chose John because he made ABOUT twice as many foul shots as Marcus. Was this a good choice?\_\_\_\_\_ Explain why or why not.\_\_\_\_\_

54. This table shows the color and number of marbles in Joe's bag.

COLOR	NUMBER
RED	2
BLUE	1
YELLOW	1
GREEN	2
ORANGE	2

\_\_\_\_\_

Without looking into the bag, what is the probability that Joe will pick a blue marble?

a) ¼ c) ⅛ b) ⅛ d) ⅛ 55. Karina and her classmates are playing a math game that involves rolling a number cube. This table shows the results after rolling the number cube 30 times.

NUMBER ON CUBE	NUMBER OF ROLLS	
1	4	
2	6	
3	5	
4	5	
5	3	
6	7	

What is the probability that Karina will roll a "5" on her next turn? \_\_\_\_\_ Show your work or explain your answer. \_\_\_\_\_

56. These numbers follow a pattern. 34, 38, 42, 46, \_\_\_\_\_ Which number should be the next number? a) 49 c) 50 b) 51 d) 52

57. These numbers follow a pattern. 800, 750, 700, 650, \_\_\_\_\_

Which number should be the next number? \_\_\_\_\_\_ Write a sentence that explains how you decided which number to write.

58. Solve this equation for *n*. 342 x *n* = 1,368 a) 2 c) 3 b) 4 d) 5 59. The sixth graders are lining up in order of their height for class pictures.

- Fernando is taller than Sue, but shorter than Pedro.
- Rebecca is the shortest.

Who is the tallest?

- a) Fernando c) Sue
- b) Pedro d) Rebecca

60. A survey was conducted at Short Beach. Sixth graders were asked if they liked swimming at the beach, swimming at a pool, or both. Of the 62 sixth graders who were asked the question:

- \* A total of 28 said they liked the beach.
- \* A total of 36 said they liked the pool.
- \* 7 said they liked both
- \* 5 said they didn't like either.

Make a Venn diagram that shows this same information. (Remember to use labels.)

61. Davon, the DJ, needs to schedule songs and breaks for each 60minute period he works. The songs and breaks Davon can use for one 60minute period are in the tables below.

SONG CHOICES	
Song	Length
Α	5 minutes 30 seconds
В	4 minutes 30 seconds
С	7 minutes 30 seconds
D	7 minutes 30 seconds
Е	4 minutes 20 seconds
F	5 minutes 40 seconds
G	6 minutes 50 seconds
Н	8 minutes 10 seconds

BREAK CHOICES	
Break	Length
W	4 minutes 30 seconds
X	5 minutes 30 seconds
Y	4 minutes 20 seconds
Ζ	5 minutes 40 seconds

Develop a schedule Davon can use given the following:

- He needs to play each song twice.
- He needs to have a break after 4 songs.
- He needs to take two breaks.

62. You are having a Labor Day picnic for your family. You estimate that:

- 30 people will have 2 hot dogs and 2 rolls each;
- 20 people will have 1 hot dog and 1 roll each;
- 10 people will have 1 hot dog and no roll each.

Hot dogs and rolls are sold two ways each:

Hot Dogs	Rolls
8 for \$1.25	6 rolls for \$0.85
12 for \$1.75	18 rolls for \$2.25

Use this information to order enough hot dogs and rolls for the people coming to your picnic. Show how many packages of each size hot dogs and rolls you will buy. Compute the final cost of all the items. Show how you arrived at your answer.

ITEMS	Number of Packages	Cost
8 hot dogs?\$1.25		
12 hot dogs/\$1.75		
6 rolls/\$0.85		
18 rolls/\$2.25		

Total Cost:\_\_\_\_\_

Websites

<u>www.funbrain.com</u> – Practice in all areas of computation at different levels. Also contains some more challenging games.

<u>www.aaamath.com</u> – Choose practice area by topic or grade level.

WWW.aplusmath.com – Bingo, Concentration, printable flash cards, and both online and printable worksheets.

http://www.superkids.com/aweb/tools/math -Printable math worksheets and logic games.

<u>www.teachingtables.co.uk/</u> - Variety of multiplication games.

<u>www.multiplication.com</u> – Multiplication practice.

http://www.internet4classrooms.com/grade\_lev el\_help.htm - Practice in all areas. Easy to use – activities are grouped by skill type. Click on "Skill Builders" the grade level.

