NAME: _____   DATE: _____

5th Grade MATH SUMMER PACKET ANSWERS
Please attach ALL work

1.)_____	26.)_____	51.)_____	76.)_____
2.) _____	27.) _____	52.) _____	77.) _____
3.)_____	28.)_____	53.)_____	78.)_____
4.)_____	29.)_____	54.)_____	79.)_____
5.)_____	30.)_____	55.)_____	80.)_____
6.)_____	31.)_____	56.)_____	81.)_____
7.)_____	32.)_____	57.)_____	82.)_____
8.)_____	33.)_____	58.)_____	83.)_____
9.)_____	34.)_____	59.)_____	84.)_____
10.)_____	35.)_____	60.)_____	85.)_____
11.) _____	36.) _____	61.) _____	86.) _____
12.) _____	37.) _____	62.) _____	87.) _____
13.) _____	38.) _____	63.) _____	88.) _____
14.) _____	39.) _____	64.) _____	89.) _____
15.) _____	40.) _____	65.) _____	90.) _____
16.) _____	41.) _____	66.) _____	91) _____
17.) _____	42.) _____	67.) _____	92.) _____
18.) _____	43.) _____	68.) _____	93.) _____
19.) _____	44.) _____	69.) _____	94.) _____
20.) _____	45.) _____	70.) _____	95.) _____
21.) _____	46.) _____	71.) _____	96.) _____
22.) _____	47) _____	72.) _____	97) _____
23.) _____	48.) _____	73.) _____	98.) _____
24.) _____	49.) _____	74.) _____	99.) _____
25.) _____	50.) _____	75.) _____	100.) _____

When entering fifth grade this is what is expected that your child should already know.

1. Read and write numbers to 1,000,000.
2. Know place value to 1,000,000. Ex. 25,068 is 2 ten thousand, 5 thousand, 0 hundreds, 6 tens and 8 ones.
3. List the first twelve multiples of a given one-digit whole number.
4. Know some numbers are called prime numbers. Some prime numbers are 2, 3, 5, 7 and 11; have exactly two factors one and itself.
5. Add, subtract and multiply whole numbers fluently.
6. Divide numbers up to four-digits by one-digit numbers and by 10.
7. Use the relationship between multiplication and division to check results and to find the value of the unknowns in equations such as x ÷ 10 = 25, 10 x 25 = 250 so x = 250; 125 ÷ z = 25, 125 ÷ 25 = 5 so z = 5.
8. Locate the decimals in tenths and hundredths on a number line.
9. Read, write, interpret, and compare decimals up to two decimal places (hundredths).
10. Convert decimals in tenths and hundredths to fraction and decimal forms.
11. Write improper fractions as mixed numbers and mixed numbers as improper fractions.
12. Compare and order up to three fractions with denominators 2, 4, and 8; and 3, 6, and 12.
13. Add and subtract fractions.
14. Find the value of an unknown in equations such as 1/8 + x = 5/8 or ¾ - y = ½.
15. Add and subtract decimals up to 2 decimal places.
16. Multiply and divide decimals up to 2 decimal places by a one-digit whole number.
17. Measure area and perimeter for compound shapes (complex figures).
18. Calculate conversions from one unit to a larger or smaller unit of measure: meters to centimeters, kilograms to grams, liters to milliliters, hours to minutes, minutes to seconds, years to months, weeks to days, feet to inches, ounces to pounds.
19. Identify and draw perpendicular, parallel and intersecting lines.
20. Find the side of a square or rectangle given its perimeter or area and possibly one side.
21. Identify basic geometric shapes including isosceles, equilateral and right triangles.
22. Identify and count faces, edges, and vertices of basic three-dimensional solids including cubes, rectangular prisms and pyramids.
23. Recognize plane figures that have line symmetry. (Where you can divide a shape in half and both halves are exactly the same.
24. Construct tables and bar graphs from given data.
25. Find the median and range of a set of data.

Excellent websites for fun learning and reinforcement of math skills:

1. www.wildmath.com   Select "Play the game". Select addition, subtraction or multiplication and grade. You can race to beat your time.
2. www.harcourtschool.com   Click the red box, select math, select HSPMath, select New Jersey, click on the "4" ball or "5" ball for a challenge. Select a game.
3. www.aplusmath.com   Go under "Flashcards" or "Game Room" on the left side of the screen. They can practice adding, subtracting and multiplying. Very important to know the addition, subtraction and multiplication facts from memorization or within a couple seconds.
4. www.mathisfun.com   Select numbers then Math Trainer for adding, subtracting and multiplication or at the home screen select games and pick a game to play.
5. www.eduplace.com Select your state – "New Jersey" press submit. Select the student tab then click on the "mathematics" rectangle. Click in the center book "Houghton Mifflin Math 2007", Click on "Grade 4". Select any games. Extra Help and Extra Practice is good, also eGames.
6. www.illuminations.nctm.org Select activities then select grade level. Click on Search.
7. www.aaamath.com At the top pick "Fourth" or "Fifth" for a challenge. Choose any of the activities like multiplication then select "play" option toward the top of the screen. 20 Questions and Countdown games are good ones.
8. www.funbrain.com Lots of fun games to choose from.

Other games and activities you can play:

• Take a deck of cards and remove the face cards (kings, queens, jacks). Aces are one. Divide the cards evenly among 2 players. Each player flips over a card. The first one to add the 2 numbers correctly the fastest wins the cards. After going through the pile of cards, the player with the most cards wins. You can do a multiplication version also.

Math Terms Students Should Be Familiar With

Edges: This is all the straight lines of a figure. Like the edge of a desk.

Faces: This is the flat surface of a figure.

Vertex: This is all the corners of a figure.

Right angle: An angle at 90° like a corner of a piece of paper.

Acute angle: An angle smaller than a right angle.

Obtuse angle: An angle larger than a right angle.

Perimeter: You add up all the sides. (You are adding all lengths of the outer edges together.)

Area: *Area of a square or rectangle = length (l) x width (w) answer is written in "square inches" (or whatever the unit measurement is).

*Area of a parallelogram is length x height. Answer written in "square inches" (or whatever the unit of measurement is)

 *Area of a triangle is ½ base x height. Answer written in "square inches"

 (or whatever the unit of measurement is).

Perpendicular lines: 2 lines that form a right angle.

Parallel lines: 2 lines that will never cross each other.

Intersecting lines: 2 lines that cross each other but do not form a right angle.

Mean: This is the average of a set of numbers. You add the set of number values and divide it by how many numbers you have.

Median: Arrange numbers from smallest to largest. It is the number that is in the middle.

 Mode: The number in a series of numbers that occurs most often.

Range: Subtract the largest number in the group from the smallest number in the group. This number is the range.

Equilateral triangle is where all 3 sides of the triangle measure the same length.

Isosceles triangle is where only 2 of the sides of a triangle are equal in length.

Conversions:

60 seconds = 1 minute   24 hours = 1 day   52 weeks = 1 year   60 minutes = 1 hour   7 days = 1 week   12 months = 1 year,   12 inches = 1 foot   10 millimeter = 1 centimeter (approx. 3 ½ centimeters = 1 inch)   3 feet = 1 yard   100 centimeter = 1 meter (approx. 1 meter = 1 yard)

Entering 5th Grade Summer Packet

First Name: _____ **Last Name:** _____

5th Grade Teacher: _____ **I have checked the work completed** _____
<div align="right">Parent Signature</div>

*Select the one best answer for each question. DO NOT use a calculator in completing this packet.

**Show all work next to each problem. *RECORD YOUR ANSWERS ON THE ANSWER SHEET PROVIDED

1.) Which of the following sets of numbers are all of the factors of 24?
   A.) 1, 3, 8, 24   B.) 2,4,6,8,12,24   C.) 2,3,4,6,8,12   D.) 1,2,3,4,6,8,12,24

2.) Which of the following are all multiples of 8?
   A.) 18   B.) 28   C.)44   D.) 56

3.) The following are all multiples of which one-digit number below: 12, 24, 30, 42
   A.) 5   B.) 6   C.) 7   D.) 8

4.) Which number is a multiple of 3?
   A.) 83   B.) 84   C.) 85   D.) 86

5.) Which of the following set of numbers are all multiples of 7?
A.) 35, 47, 52   B.) 35, 36, 37   C.) 35, 42, 49   D.) 37, 47, 57

6.) Al sees this sign at a copy center. What is the least number of copies Al can make without losing any money?

1.	Copies cost $.10 each
2.	Copy machines only take quarters
3.	Copy machines do NOT make change, if you make 1 copy, you will NOT get $.15 back

   A.) 5   B.)30   C.)75   D.) 150

7.) Which of the following is NOT true about prime numbers?
   A.) They have exactly two factors   B.)One is a factor of every prime number
   C.)No prime numbers end in zero   D.)All prime numbers are odd numbers

8.) Which set does NOT contain any multiples of 4?
   A.){24, 36, 42, 54}   B.) {12, 15, 20, 24}   C.) {8, 16, 24, 34}   D.) {6, 10, 14, 18}

9.) I am a factor of 36 and a multiple of 3. What number am I?
   A.) 2   B.) 4   C.)12   D.)15

10.) My number is a multiple of 5. It is less than 100 and has a factor of 6. What is my number?
   A.)25   B.)36   C.)60   D.)66

11.) Solve 136 – 67=_____   A.)61   B.)69   C.)71   D.)79

12. Solve 206 – 48=_____   A. 158   B. 242   C. 162   D. 262

13. $\begin{array}{r} 2{,}749 \\ \times\ \ 68 \\ \hline \end{array}$ 14. $\begin{array}{r} 156 \\ \times\ \ 78 \\ \hline \end{array}$ 15. $\begin{array}{r} 837 \\ \times\ \ 46 \\ \hline \end{array}$ 16. $\begin{array}{r} 2{,}643 \\ \times\ \ 20 \\ \hline \end{array}$

17.) What is 1486 divided by 3? Show your work in the space provided.

   A. 4,812 r0   B. 495 r1   C. 280 r10   D. 496 r0

18.) What is 2520 divide by 10? Show your work in the space provided.

   A. 25,200   B. 2,520   C. 253   D. 252

19.) There are 168 lunches to be shared equally among 3 fifth grade classes. How many lunches will go to each class?

   A. 56   B. 165   C. 171   D. 504

20.) What value of n makes the following equation true?   n÷7=21

   A. 3   B. 28   C. 141   D. 147

21.) Which value of p makes the following equation true?   270÷ p=10

   A. 18   B. 20   C. 27   D. 15

22.) Which math problem can be checked using 3x6=18?

   A. 18 x 3=   B. 18 + 3=   C. 18÷3=   D. 18 - 3=

23.) The students in your class collected soda cans for a class trip. The goal for each student was to collect 150- cans each. There are 27 students in your class. How many cans would that be altogether?

   A. 177 cans   B. 405 cans   C. 1350 cans   D. 4050 cans

24.) Suppose 33 photos are placed in a photo album. How many pages are needed if 3 photos fit on a page?

   A. 9 pages   B. 10 pages   C. 11 pages   D. 12 pages

25.) Mr. Clark was given some change at the grocery store. He was given 5 one dollar bills, 6 quarters, 2 dimes, and a penny.   How much money was he given?

   A. $5.62   B. $6.71   C. $56.21   D. $6.21

26.)   What is another way to write .7 inches?

   A. $\frac{7}{1000}$ B. $\frac{7}{100}$ C. $\frac{7}{10}$ D. $\frac{7}{10000}$

27.) Which is equal to .45?   A. $\frac{4}{5}$ B. $\frac{45}{100}$ C. $\frac{100}{45}$ D. $\frac{45}{1000}$

28.) Which number is the same as one fourth?

   A. 0.4   B. 0.04   C. 0.25   D. 0.75

29.) Which point on the number line below best represents 1.75?
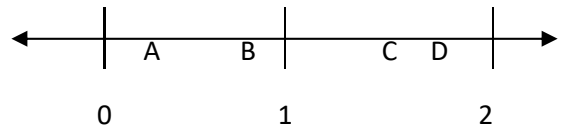
   A. Point A   B. Point B   C. Point C   D. Point D

30.)   Which point on the number line below best represents .25?

   A. Point A   B. Point B   C. Point C   D. Point D

31.) Write Eight tenths   as a decimal _____   32.) Write Two hundredths as a fraction _____

33.) Write Eighteen hundredths as a decimal _____   34.) Write Five tenths as a fraction _____

35.) Write fifty-two hundredths as a decimal _____   36.) Write One tenth as a fraction _____

37.) Write $\frac{4}{10}$ as a decimal _____   38.) Write $\frac{22}{100}$ as a decimal _____

39.) Write $\frac{40}{100}$ as a decimal _____   40.) Write $\frac{2}{10}$ as a decimal _____

41.) Write $\frac{8}{100}$ as a decimal _____   42.) Write $\frac{5}{10}$ as a decimal _____

43.) Choose the circled group that represents $\frac{1}{3}$ of the stars in the picture.

A.   B.   C.   D.
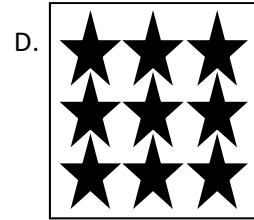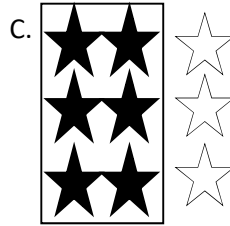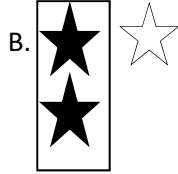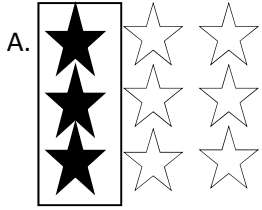
44.) There are 4 red cars, 5 blue cars, and 2 green cars in the parking lot. What is the fraction of BLUE cars in the parking lot?

A.) $\frac{5}{4}$ B.) $\frac{5}{9}$ C.) $\frac{5}{11}$ D.) $\frac{11}{5}$
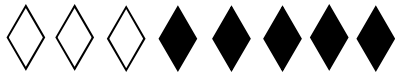
45.) What is the fraction for the shaded part of this set?

A.) $\frac{3}{8}$ B.) $\frac{3}{4}$ C.) $\frac{3}{7}$ D.) $\frac{5}{10}$

46.) Look at this set of objects. Which fraction stands for the part of the set that is shaded?

A.) $\frac{3}{5}$ B.) $\frac{5}{3}$ C.) $\frac{5}{8}$ D.) $\frac{3}{8}$

47.) How many twelfths equal $\frac{5}{6}$?   A.) $\frac{10}{12}$ B.) $\frac{11}{12}$ C.) $\frac{6}{12}$ D.) $\frac{5}{12}$

48.) How many eighths equal $\frac{1}{4}$?   A.) $\frac{1}{8}$ B.) $\frac{2}{8}$ C.) $\frac{4}{8}$ D.) $\frac{7}{8}$

49.) Which number is an improper fraction?   A.) $\frac{11}{12}$ B.) $\frac{5}{8}$ C.) $\frac{8}{5}$ D.) $\frac{6}{7}$

50.) Convert this improper fraction into a mixed number. $\frac{11}{2}$

A.) $11\frac{1}{2}$ B.) $\frac{2}{11}$ C.) $4\frac{1}{2}$ D.) $5\frac{1}{2}$

51.) Which of the following is listed from smallest to largest? Draw pictures if needed.

A.) $\frac{11}{4}, \frac{15}{6}, 2\frac{7}{12}$

B.) $\frac{15}{6}, \frac{8}{3}, 2\frac{7}{12}$

C.) $\frac{15}{6}, 2\frac{7}{12}, \frac{8}{3}$

D.) $\frac{8}{3}, 2\frac{7}{12}, \frac{11}{4}$

52.) Choose the equation that is **NOT** true.

A.) $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

B.) $\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$

C.) $\frac{6}{10} + \frac{3}{10} = \frac{9}{10}$

D.) $\frac{8}{12} - \frac{2}{12} = \frac{10}{12}$

53.) The distance from home to school is $\frac{7}{8}$ of a mile for Amy and $\frac{4}{8}$ of a mile for Tom. How much farther does Amy walk than Tom?

A.) $\frac{11}{8}$

B.) $\frac{11}{16}$

C.) $\frac{3}{16}$

D.) $\frac{3}{8}$

54.) Sonya needs $\frac{1}{2}$ teaspoon of salt for her recipe to make rolls. She needs $\frac{1}{4}$ teaspoon of salt for her recipe to make biscuits. How much salt will she need to make both recipes?

A.) $\frac{2}{6} tsp.$

B.) $\frac{3}{4} tsp.$

C.) $\frac{1}{8} tsp.$

D.) $\frac{1}{6} tsp.$

55.) Which of the following is closest to the sum of 811 and 356? Do not use a calculator.

A.) 1400

B.) 1300

C.) 1200

D.)1100

56.) Which of the following is closest to the product of 81 and 82? Do not us a calculator.

A.) 6400

B.) 7200

C.) 720

D.)64,000

57.) One hundred fourth graders at Beacon Tree Elementary are attending a field day. The teachers need to know how many hot dogs to buy. All the following are reasonable estimates EXCEPT for which one?

A.) 100 hot dogs

B.) 150 hot dogs

C.) 200 hot dogs

D.)50 hot dogs

58.) A cat sleeps an average of 17 hours a day. About how many hours does a cat sleep in a month?

A.) 300 hours

B.) 600 hours

C.) 170 hours

D.) 6000 hours

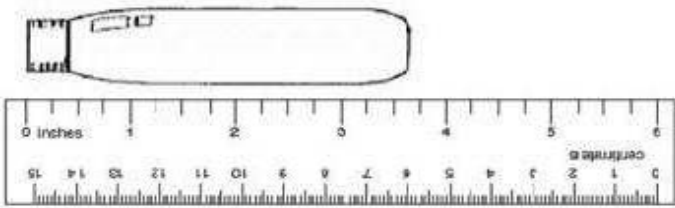59.) The pencil is about how many centimeters long?
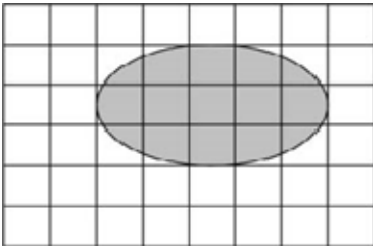

A.) 9cm

B.) 10cm

C.) 11cm

D.) 12cm

60.) What is the length of this light bulb to the nearest inch?

A.) 2in.   B.) 3in.   C.) 4in.   D.) 5in.

61.) What is the best estimate of the area, in square centimeters, of the SHADED FIGURE on the grid below?
One square equals one square centimeter.

A.) 5 sq. centimeters   B.) 11 sq. centimeters   C.) 13 sq. centimeters   D.) 15 sq. centimeters

62.) Which is most likely the length of a telephone book?

A.) 30 kilometers   B.) 30 centimeters   C.) 30 millimeters   D.) 30 meters

63.) Brent is making a sail for a toy boat. The sail needs to be 3.55cm wide. Which measure would be MOST useful in making the sail?

A.) To the nearest millimeter   B.) To the nearest decimeter
C.) To the nearest meter   D.) To the nearest kilometer

64.) Bobbie was writing an article for the school paper about the amount of homework the 4th grader teachers were assigning. He was surprised to find out that the average student only spent 20 minutes per night doing homework. To make it sound longer, he decided to convert the time from minutes to seconds in the article. How many seconds did the average student spend on homework?

A.) 80 seconds   B.) 120 seconds   C.) 800 seconds   D.) 1,200 seconds

65.) Sheryl planned to buy a wall paper border for her bedroom. She measured the lengths of the wall and found the perimeter of her room. Use the picture below to determine the perimeter.

10ft.

12ft. | | 12ft.

10ft.
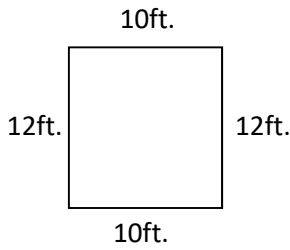
A.) 22 ft.   B.) 34 ft.   C.) 44 ft.   D.) 120 ft.

66.) Find the perimeter of the figure below?

6ft.

4 ft.   6ft

4ft.

2ft.

2ft.
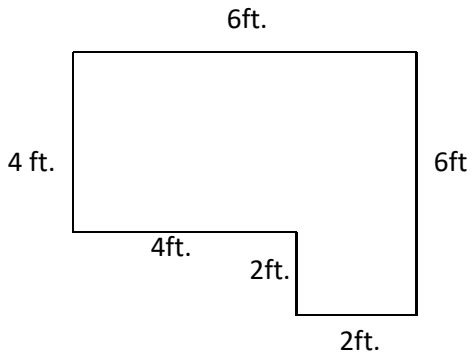
A.) 12 ft.   B.) 18 ft.   C.) 24 ft.   D.) 36ft.

67.) What is the area of the figure above?

A.) 12 sq. ft.   B.) 28 sq. ft.   C.) 24 sq. ft.   D.) 36sq. ft.

68.) What is the width of a rectangle with a length of 5 inches and a perimeter of 16 inches?

A.) 2inches   B.) 3 inches   C.) 8 inches   D.) 21 inches

69.) Sarah opens her book. What is the angle formed by the open book?

A.) an acute angle   B.) a right angle   C.) an obtuse angle   D.) a straight angle
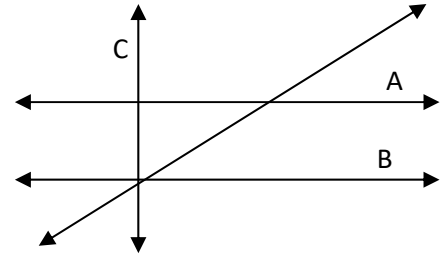
70.) Which of the following is closest to 8 x 0.92?   A.) 800   B.) 80   C.) 8   D.) 8.92

71.) Which angle is a right angle?

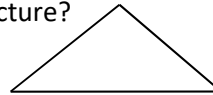A.)   B.)   C.)   D.)

D
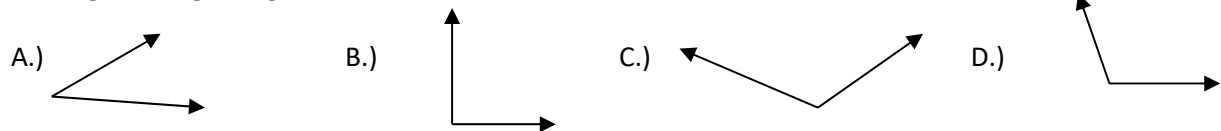
72.) Use the diagram to find a line that is parallel to line A

    A.) Line C   B.) Line D   C.) Line B   D.) None

73.) In the drawing, which line is perpendicular to line B

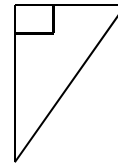   A.) Line C   B.) Line D   C.) Line B   D.) None

74.) Which type of triangle has only 2 equal sides, like the following picture?

    A.) Isosceles triangle   B.) Pyramid

    C.) Equilateral triangle   D.) Right triangle

75.) Which geometric figure is shown here?

    A.) Isosceles triangle   B.) Pyramid

    C.) Equilateral triangle   D.) Right triangle

76.) Use the square pyramid to find the number of vertices.

    A.) 2 vertices   B.) 3 vertices   C.) 4 vertices   D.) 5 vertices

77.) Use the square pyramid to find the number of faces.

    A.) 2 faces   B.) 3 faces   C.) 4 faces   D.) 5 faces
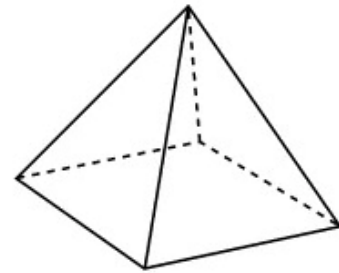
78.) Use the square pyramid above to find the number of edges.

    A.) 3 edges   B.) 4 edges   C.) 5 edges   D.) 8 edges

79.) Which shows the fractions in order from least to greatest?

    A. 1/4, 1/3, 1/2   B. 1/2, 1/3, 1/4   C. 1/3, 1/4, ½

80.) Use the following set of data to find the median.   {2, 2, 3, 5, 10, 10, 10}

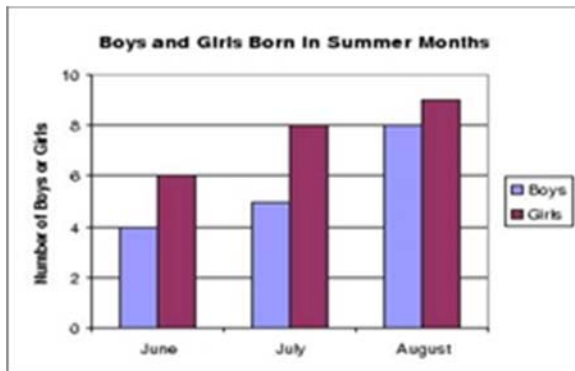   A.) 5   B.) 6   C.) 7   D.) 8

81.) Use the following set of data to find the range. {2, 2, 3, 5, 10, 10, 10}

   A.) 5   B.) 6   C.) 8   D.) 10

82.) Use the set of data from above to find the mean.

   A.) 5   B.) 6   C.) 7   D.) 9

83.) How many more girls were born in June through August than boys?

Boys and Girls Born In Summer Months

   A.) 5   B.) 6   C.) 7   D.) They are the same

84.)   235   85.)   699   86.)   68.1   87.)   14.98
       +479   + 897   + 95.7   + 93.09

88.)   600   89.)   1233   90.)   8.1   91.)   100.2
      - 349   - 589   - 5.7   - 81.7

92.)   58   93.)   928   94.)   28   95.)   428
       X 8   X   9   X 39   X   39

96.) 9000 ÷ 90=_____   97.) $56.50 ÷ 5=_____   98.) 732 ÷ 4=_____   99.) 4076 ÷ 3=_____

100.) 810 ÷ 9=_____