Math Bower

April 12, 2020	By Dr. Li
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Name: (First)(Last)	
School: Grade:	
MUL-DIV MIXED OPERATIONS	2
OPERATING NUMBERS	
MUL-DIV MIXED OPERATIONS	
OPERATING NUMBERS	
PICTURE ANALOGY	
GT3 STRETCHES GT3 STRETCHES	
G19 81NE1CHE8	9

Mul-Div Mixed Operations

13. ____× 4=20

14. 32 ÷ ____=4

15. 16 ÷ 8=

3.
$$14 \div 2 =$$

16. 24 ÷ ____=8

17. 12 ÷ ____=4

18. 2 × 2=

19. ____×2=16

20. ____×4=36

Operating Numbers

$$21. 6 + 4 + 2 =$$

22.
$$8 + 2 + 6 =$$

$$25. \ 3 + 3 - 4 =$$

$$37. 7 + 8 + 4 =$$

26.
$$7 + 5 - 9 =$$

38.
$$4 \times 9 \times 7 =$$

$$27. 6 + 4 + 9 =$$

$$28. \ 4 + 2 + 4 =$$

29.
$$7 + 9 + 9 =$$

31.
$$2 + 9 \times 4 =$$

$$32. 3 + 9 + 5 =$$

33.
$$7 \times 2 + 3 =$$

35.
$$6 + 3 \times 2 =$$

47.
$$9 \times 6 =$$

36.
$$8 \times 5 - 2 =$$

48.
$$9 \times 4 =$$

Operating Numbers

61.
$$8 + 4 + 8 =$$

62.
$$4 + 5 + 9 =$$

64.
$$6 \times 2 - 5 =$$

65.
$$5 \times 5 + 9 =$$

66.
$$9 + 6 \times 8 =$$

67.
$$7 \times 8 - 8 =$$

68.
$$7 + 7 \times 5 =$$

69.
$$3 + 5 \times 5 =$$

58.
$$56 \div 8 =$$

70.
$$4 \times 8 - 5 =$$

71.
$$9 \times 4 - 8 =$$

72.
$$7 \times 4 - 5 =$$







75.
$$3 + 8 \times 3 =$$





76.
$$3 \times 2 - 5 =$$





77.
$$6 \times 9 \times 6 =$$













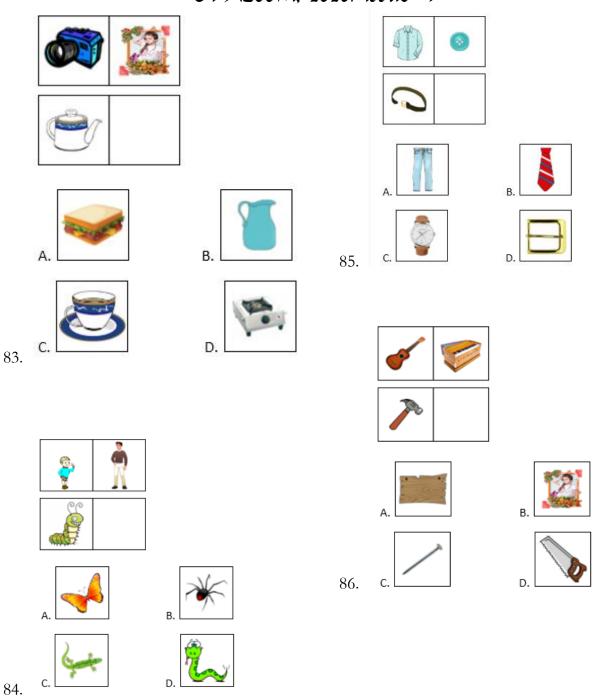


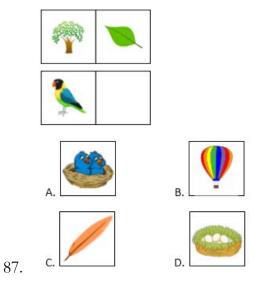


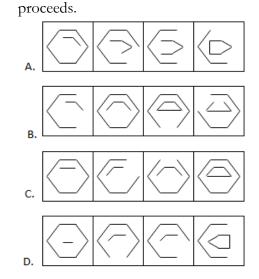


Picture Analogy

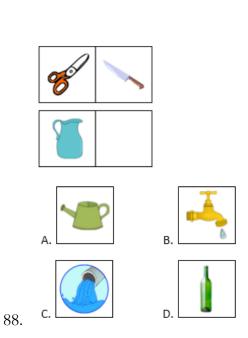


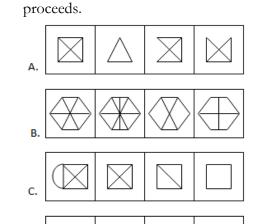






89. The closed figure loses its sides, and the open figure gains its sides as the series



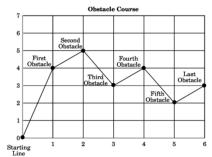


90. The image becomes simpler as the series

GT3 Stretches

- 91. Which unit is best used for measuring the amount of water in a swimming pool?
 - A) ounce
 - B) foot
 - C) gallon
 - D) mile

- 92. Mr. Brown bought 6 towels. All the towels were the same price. The total cost was \$84. How much money did each towel cost?
- 93. To earn his bicycle safety certificate, Trevor had to ride his bicycle through an obstacle course. Trevor studied the map before his ride.



What are the coordinates of the Fifth Obstacle?

- A) (2, 5)
- B) (4, 4)
- C) (5, 2)
- D) (6, 3)
- 94. The total length of a vehicle is 205.83 inches. What is the length of the vehicle rounded to the nearest whole number?
- 95. Find the missing number: $14 + \Box = 51$
- 96. Maurice talked on the telephone to two friends. He talked to Sherry for $\frac{1}{4}$ hour, and to Gabriel for $\frac{1}{3}$ hour. How much time in minutes did Maurice spend on the telephone?

97. The coats shown below are hanging on coat hooks.



What fraction of the coats are white?

- B) $\frac{1}{3}$ C) $\frac{2}{3}$ D) $\frac{2}{5}$
- 98. The total land area for the United States is 3,537,499 square miles. What is this value rounded to the nearest thousand square miles?
- 99. Which fraction is greater than $\frac{3}{4}$?
 - A) $\frac{1}{2}$
 - B) $\frac{10}{12}$ C) $\frac{3}{7}$ D) $\frac{2}{6}$

100. Find the missing number: $3, 5, 8, 12, 17, 23, 30, \square$

101. In one hour, Tracy walked 2.31 miles on a treadmill. Lisa walked 1.95 miles in the same amount of time. How much farther did Tracy walk than Lisa?

Question set [102 - 103]

Mary had 6 jewelry boxes. She put 5 perls in the first box, 8 pearls in the second box. She kept adding 3 more in the following box.

- 102. How many pearls can Mary put in the last jewelry box?
- 103. How many pearls did she keep in these 6 boxes?
- 104. Mr. Wilson's class made the chart below to show the number of birds that ate at a bird feeder on five days.

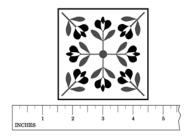
Birds That Ate at the Bird Feeder

Day	Number of Birds		
Monday	8		
Tuesday	18		
Wednesday	30		
Thursday	12		
Friday	20		

How many more birds ate at the bird feeder on Wednesday than on Monday?

- 105. Mr. Harrington bought some boxes of oranges at the market. He bought a total of 72 oranges. There were 6 oranges in each box. How many boxes of oranges did Mr. Harrington buy?
- 106. Amanda is planting flower seeds in flowerpots. If she plants 36 seeds and she plants 6 seeds in each flowerpot, how many flowerpots will Amanda use?
 - A) 6
 - B) 12
 - C) 30
 - D) 216

- 107. Which place value shows that 5,487 is less than 5,874?
 - A) ones place
 - B) tens place
 - C) hundreds place
 - D) thousands place
- 108. How many digits are needed to write down all numbers from 1 to 100?
- 109. Wendy jogged for 30 minutes on Friday, 42 minutes on Saturday, and 55 minutes on Sunday. What is the total time she jogged?
- 110. Karen has these square tiles in her kitchen. The picture below shows the size of an individual tile. What is the area in square inches of the tile shown below?



GT3 Stretches

111. The table shows the departure time at an airport.

Airplane	Time
1	8:15 а.м.
2	8:30 а.м.
3	8:45 a.m.
4	9:00 a.m.
5	9:15 a.m.

If the pattern continues, what time should the 7th airplane leave?

112. Find the missing number:

$$10 + 12 = 25 - \square$$

117. Sally earns a quarter a day helping her mom with the house chores. How much does Sally earn in a week?

 $113.2^2 + 3^2 =$

- 118. What is the greatest 4-digit number that has all of the following characteristics?
 - It is an odd number
 - The sum of the digits is 6
 - Each digit is different

114. How many cells are in the following fiure?



The answer is:

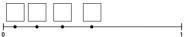
$$8 \times 4 = 32$$

many rows will she have? Which of the following is equivalent to

- the above computation? A) $8 \div 4 = 2$
- B) $12 \div 4 = 3$
- C) $24 \div 8 = 3$
- D) $32 \div 8 = 4$

120. The points on the number line below show the positions of four fractions.

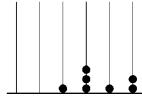
119. If Daisy puts her 28 horse statues into rows with 4 statues in each row, how



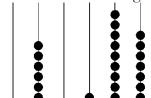
Fill in each box on the number line with the correct fraction below.

$$\frac{1}{3}$$
, $\frac{1}{2}$, $\frac{1}{10}$, $\frac{1}{6}$

115. The beads on the counting frame shown below represent the number 1,312.



What number is represented by the beads on the counting frame below?



116. How many right angles are in a rectangle?

- 121. Ms. Roland measured the length of a board she was using to make a shelf. Which of the following could be the length of the board?
 - A) 6 square feet
 - B) 6 pounds
 - C) 6 gallons
 - D) 6 feet

Question set [122 - 123]

The school store sells pencils, pens and erasers. The picture shows the cost of each of these items. Becky bought 2 pencils, 5 pens



and 2 erasers.

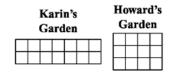
	Pencils 10¢	Pens 15¢	Erasers 25¢	

- 122. How much money did Becky spend?
- 123. The next week Becky spent 85¢ in the store. She bought at least one pen and two erasers. Use the table below to show how she could spend exactly 85¢.

Item	Number	Total Cost
Pencils		
Pens		
Erasers		
		85¢

- 124. Five children share 27 crayons. Each child gets the same number of crayons. How many crayons will each child get? How many crayons will be left over?
 - A) Each gets 3 and 2 remain.
 - B) Each gets 2 and 5 remain.
 - C) Each gets 5 and 2 remain.
 - D) Each gets 4 and 3 remain.
- 125. Which of the following is a three-dimensional shape?
 - A) quadrilateral
 - B) pyramid
 - C) triangle
 - D) rectangle
- 126. I imagined a number. It is larger than 10 and smaller than 20. If I switch the order of digits, then the new number is larger than 60 and smaller than 70. What number did I imagine?

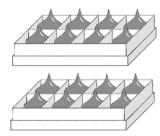
- 127. Crystal opened a new package of stickers. She gave 6 stickers to each of her 3 friends. She has 12 stickers left for herself. How many stickers were in the package?
- 128. Ground beef sells for \$5.00 per pound. How much does 12 pound of ground beef cost?
- 129. Karin's and Howard's gardens are shaped like rectangles. A model of each garden is shown below.



= 2 square feet

How many square feet larger is the area of Karin's garden than the area of Howard's garden?

130. Marta and Nate had two boxes of candies shown below.



Marta ate $\frac{5}{8}$ of the candies. Nate ate $\frac{1}{4}$ of the candies. What fraction of the box of candies was left?

- A) 3/8
- B) 1/8
- C) 1/8
- Ď) 1/6

Answer Ley

1. 18

2. 2

7
24

5. 15

6. 3

7. 2

8. 3

9. 4

10. 4

11. 4

12. 8

13. 5

14. 8

15. 216. 3

17. 3

18. 4

19. 8

20. 9

21. 12

22. 1623. 14

24. 4

25. 2

26. 3

27. 19

28. 10

29. 25

30. 14

31. 3832. 17

J**_**, 1,

33. 1734. 28

35. 12

36. 38

37. 19

38. 252

39. 96

40. 224

41. 9

42. 18

43. 4

44. 3

45. 32

46. 2

47. 54

48. 36

49. 16

50. 7

51. 7 52. 4

53. 7

54. 48

55. 6

56. 48

57. 12 58. 7

59. 5

60. 9

61. 20

62. 18

63. 1064. 7

65. 34

66. 57

67. 48

68. 42

69. 28

70. 27

71. 28

72. 23

73. 9

74. 25

75. 27

76. 1

77. 324

78. 36

79. 48

80. 96

81. A

Same function for delivering the work.

82. B

communication v.s. transportation.

- 83. C camera to make photo
- tea kettle to make a cup of tea 34. A
- 84. A child to adult caterpillar to butterfly (metamorphosis)
- 85. D button is part of a shirt buckle is part of a belt
- 86. D musical instruments & carpentry tool
- 87. C leaf is part of a tree feather is part of a bird
- 88. A cutting tool v.s. water container
- 89. Answer: A

Explanation:

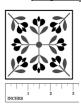
In the first series, the closed figure loses sides one by one and the open figure gains sides one by one as the series proceeds.

90. **Answer:** C **Explanation:**

In the third series, the image becomes simpler as the series proceeds.

- 91. C
- 92. $84 \div 6 = \$14$
- 93. C
- 94. 206 inches
- 95. 37
- 96. $\frac{1}{4}$ hr = 15 min $\frac{1}{3}$ hr = 20 min 15 + 20 = 35 min
- 97. D
- 98. 3,537,000
- 99. B
- 100.38
- 101. 0.36 mile
- 102. 5, 8, 11, 14, 17, 20
- 103.5 + 8 + 11 + 14 + 17 + 20 = 75
- 104.30 8 = 22
- $105.72 \div 6 = 12$
- 106. A

- 107. C
- 108. 1 to 9: 1 digit each 10 to 99: 2 digits each 100: 3 digits 9 + 2(90) + 3 = <u>192</u>
- 109. 2 hr 7 min
- 110. $3 \times 3 = 9$ sq. inches



- 111.9:15 + 0:30 = 9:45 A.M.
- 112. $\Box = 3$
- 113. 13
- 114. D
- 115.60,197
- 116.4
- $117.0.25 \times 7 = \$1.75$
- 118.3201
- $119.28 \div 4 = 7$
- 120. From left to right: $\frac{1}{10}$, $\frac{1}{6}$, $\frac{1}{3}$, $\frac{1}{2}$
- 121. D
- $122. 2 \times 10 + 5 \times 15 + 2 \times 25$ = 20 + 75 + 50 = 145
- 123.2 pencils +1 pen +2 erasers
- 124. C

$$27 \div 5 = 5R2$$

- 125. B
- 126.16
- $127.3 \times 6 + 12 = 30$
- $128.12 \times 5 = \$60$
- 129. B

$$K = 2 \times 7 = 14$$

$$H = 3 \times 4 = 12$$

$$14 - 12 = 2$$
 squares

$$2 \times 2 = 4 \text{ sq. ft}$$

130. C

$$\frac{5}{8} + \frac{1}{4} = \frac{7}{8}$$

$$1 - \frac{7}{9} = \frac{1}{9}$$