Western Middle School
Summer Math Packet
For Students Entering 8th Grade

Name:_____

Please complete this entire math packet and bring it with you to your first day of 8th grade math. All students are required to complete a summer mathematics assignment. This assignment includes topics that students should know prior to entering 8th grade. Remember to keep this in a safe place!

1.) What is 0.01 MORE than 1.09?
a) 1.10
b) 1.19
c) 2.09
d) 2.10

2.) Which means the same as 6 + 0.3 + 0.01?
a) 630.1
b) 63.01
c) 6.31
d) 6.031

3.) 3/5 of Chip's family likes corn. Which decimal number names the same amount?
a) 3.5
b) 0.35
c) 0.60
d) 0.06

4.) 70 percent of Sally's family likes to drink whole milk. What decimal names the same amount?
a) 0.7
b) 0.77
c) 0.07
d) 7.0

5.) Jimmy rode his bike between 1 1/4 hours and 1 3/4 hours on Saturday. Which could be the number of hours Jimmy rode his bike?
a) 1 3/8
b) 1 5/8
c) 1 7/8
d) 1 13/16

6.) Alicia makes an average of $61.50 each month for babysitting. Which is the best estimate of how much she makes in a year?

a) $600
b) $700
c) $800
d) $650

7.) 1/4 + 3/8 =
a) 5/4
b) 5/8
c) 4/8
d) 4/12

8.) 14 x 2/3 =
a) 21
b) 9 1/3
c) 5 1/3
d) 1/21

9.) The employees of the local insurance company collected $5768.67 for a new children's playground. The employees of a local car dealership collected $3910.56. How much money did they collect all together?
a) $9679.23
b) $9679.13
c) $9678.13
d) $8679.23

10.) Gregory needs to multiply 989 by 79,899. Which of the following would be **BEST** for Gregory to use to ESTIMATE the difference?
a) 900 x 80,000
b) 900 x 70,000
c) 1000 x 80,000
d) 1000 x 70,000

11.) Lois rode on the bus 37.45 miles the first week of school and 28.85 miles the second week. ABOUT how many miles did she ride on the bus during the two weeks?
a) A little less than 60
b) A little more than 60
c) A little less than 70
d) A little more than 70

12.) In the year 2004, the U.S. census reported that an **estimated** 807,368 persons living in Connecticut were under the age of 18. That number rounded to the nearest hundred is:
a) 807,300
b) 807,360
c) 807,370
d) 807,400

13.) Meredith's brother was 19.5 inches long at birth and 34.75 inches tall on his third birthday. Which number sentence could be used to find the average number of inches that Meredith's brother grew each year?

a) (34.75 - 19.5) / 4= _____
b) (34.75 - 19.5) / 3= _____
c) (34.75 + 19.5) /4= _____
d) (34.75 + 19.5) /3= _____

14.) Which means the same as 463,800 expressed in scientific notation?

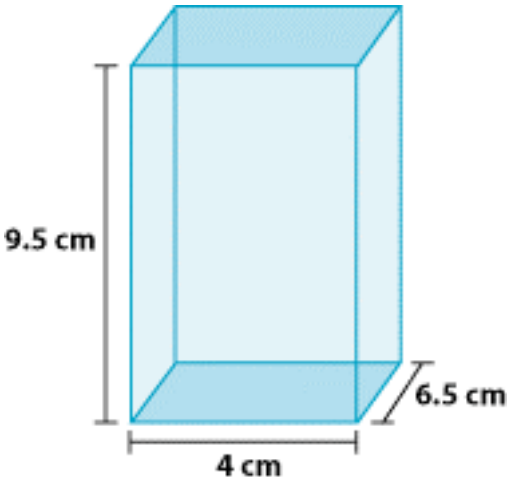
a) 4.638×10^3
b) 4.638×10^5
c) 46.38×10^4
d) 4638×10^6

15.) Ron is paid $6.70 per hour for mowing lawns. On Friday, he mowed for 5 hours and on Saturday he mowed for 6.5 hours. How much did he earn on these two days?

Choose the correct answer and solution strategy from the following choices.

a) Ron earned $73.70.To find this answer, multiply (6.7 x 5) + (6.7 x 6).
b) Ron earned $77.05.To find this answer, multiply (6.7 x 5) + (6.7 x 6.5).
c) Ron earned $83.60.To find this answer, multiply (7.60 x 5) + (7.60 x 6).
d) Ron earned $87.40.To find this answer, multiply (7.60 x 5) + (7.60 x 6.5).

16.) What is the volume of this shape? _____



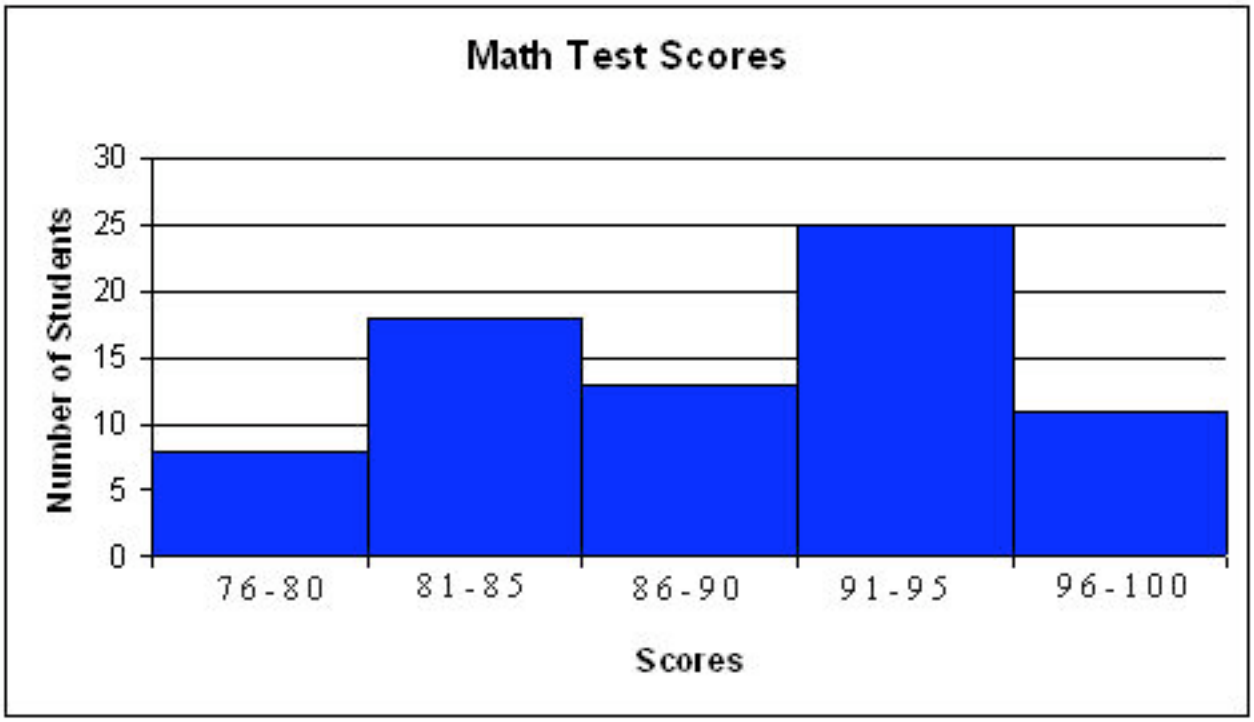
17.) Which two names describe this shape?

a) isosceles and trapezoid
b) right and trapezoid
c) regular and pentagon
d) irregular and pentagon

18.) Fill in the blank. Every _____ can be described as a regular rectangle.

a) Parallelogram
b) Prism
c) Square
d) Trapezoid

19.)



Based on the histogram, how many students earned a score that was **more** than 90 points on the math test?

a) 35
b) 40
c) 48
d) 50

20.) Samantha is purchasing a new computer for $2300. She has the choice of 4 payment options to pay for the computer.

1. Pay $1,000 and then finance the rest of the money over a period of a year with an 8% interest charge on the money financed.
2. Pay no money down, and pay the rest over a period of 1 year with an added $10 per month charge.
3. Pay $1500, and finance the rest of the money over the period of a year with a 12% interest charge.
4. Pay $1800, and finance the rest of the money over a period of 2 years with a 10% interest charge on the money financed.

Which payment option will cost the **least** amount of money?

a) 1
b) 2
c) 3
d) 4

21.) If the ratio of oil to gas in a lawn mower is 1 to 16, which of these should **NOT** be used in the mower?

a) 4 parts oil, 64 parts gas
b) 2 parts oil, 32 parts gas
c) 1 part oil, 8 parts gas
d) 5 parts oil, 80 parts gas

22.) Helene worked 6 hours and was paid a total of $27. At this rate, how long would it take her to earn $90?

a) 40.5 hours
b) 20 hours
c) 15 hours
d) 3 1/2 hours

23.) Greg is 150 centimeters tall. How many meters is that?

a) 0.500
b) 1.5
c) 15
d) 15,000

24.) Which is the BEST unit to measure the amount of water needed to fill a swimming pool?

a) Gallons
b) Quarts
c) Pints
d) Cups

25.) Jim is running a 5-kilometer road race. How many meters is that?

a) .5 meters
b) 5000 meters
c) 50,000 meters
d) 500 meters

26.) Use order of operations $16 \div (2 - 1) =$

a) 7
b) 16
c) 6
d) 8

27.) In this formula, *C* represents the total charge for babysitting and *H* represents the number of hours the child is kept. How much should Joe pay if his child is at the babysitting service for 3 hours?

$C = \$5.25 + \$2.50H$

a) $ 7.75
b) $12.75
c) $14.25
d) $23.25

28.) Simplify $\dfrac{2+8\div 2\cdot 4}{6-3^2\div 3}$

a) 9 b) 6 c) 1 d) 3

29.) Joe just bought *M* baseball trading cards. He sold 6 to his friend. Which expression represents how many new trading cards he has left?

a) $6 - M$
b) $6M$
c) $M + 6$
d) $M - 6$

Open Ended: Answer the questions below in the space provided. Be sure to show your work.

30.) Write a story problem that can be solved using the equation:
18.64 ÷ 0.5 = **X**.

31.) Anita drove 83.4, 98.1, 83.2 and 94 miles on four different days. What is the
AVERAGE number of miles Anita drove on the four days?

32.) Leslie bought 3 notebooks that each cost $2.89 and 6 pens that each cost $.79.She handed the clerk a $20. If there is no tax, how much change should Leslie receive? Show or explain how you got your answer.

33.) Kim wants to ESTIMATE the cost per ounce of an 8.7-ounce jar of sauce that costs $1.75.What would be a GOOD ESTIMATE? Explain how you made your estimate.

34.) The groundskeeper at the ballpark needed sod to cover 380.75 square-feet of one field and 590.50 square-feet of another. If he bought 800 square-feet of sod, did he buy enough to cover both fields?
Explain how you could use ESTIMATION to decide if he bought enough sod.

35.) Kelly saved 40% of her $90 paycheck. How much money did she save?

36.) During the past month, you withdrew $22 from your savings account and then deposited $24. If your balance at the end of the month is $120, how much did you have in your account at the beginning of the month? Show your work in the space below.

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37.) To print tickets, a printer charges a $70 setup fee plus $1.25 per ticket. Write an algebraic expression for the cost of t tickets. What is the cost of 650 tickets?

38.) Four friends are planning a camping trip. At one store, they buy a lantern for $35 and 4 batteries for $4 each. At another store, they buy hamburgers that cost $15, three bags of chips that cost $2 per bag, and a bag of hamburger rolls for $4. Each will contribute the same amount of money toward the supplies.

a.) Write a numerical expression for the amount the friends spent.

_____

b.) How much money does each person need to contribute? Show your work below.

39.) To estimate the product of 2487 and 193, Mary multiplied 2000 and 200. Would her estimate be more or less than the actual product? Explain.

40.) Paul worked 15 hours and earned $127.50. At this rate, how long would it take for Paul to earn $170.00. Explain how you got your answer.

41.) Sally purchased a sweater on sale for 30% off. If the original price is $45.00, then how much did she save with the sale? Explain how you got your answer.

42.) Steve has $400 to spend on clothes for school. He has narrowed his choices down to the list in this chart.

Shirts	**Price**
Nauticals	$24.95
Polar	$26.75
Hilly Slope	$14.58
Pants	**Price**
Docker Rockers	$70.88
Space pants	$60.75
Shoes	**Price**
Walkers	$70.75
Runners	$84.60

He will buy at least 3 shirts, two pairs of pants, and 1 pair of shoes. Show what he could buy if he wants to spend between $250 and $300. Show your work and explain how you got your answer.