Name: _____

Summer Math Packet for Students Entering 6th grade

PLEASE SHOW ALL WORK.

1.) Frank reasoned that 97/1000 can be written as 0.97. Is this correct? If not, justify your reasoning.

_____

_____

_____

2.) What is the missing number in the table?

x	12	26	30	36
y	8	22	26	

3.) Paco has $300. June has 1/10 as much money as Paco. She has 10 times as much money as Marie. How much money does June have? How much money does Marie have?

4.) Write in expanded form: 356,904.345

5.) Kathy has 1 cat that is 13.6 cm tall. She has another cat that is 6.1 cm tall. How much taller is one cat than the other?

6.) A dollhouse has 15.15 square feet downstairs and 6.35 square feet upstairs. What is the total square footage of the dollhouse?

7.) Use the Distributive Property to complete the equation.

$$\begin{aligned} 509 \times 11 &= (500 + 9) \times 11 \\ &= (500 \times \_\_\_\_\_) + (9 \times \_\_\_\_\_) \\ &= \_\_\_\_\_ + 99 \\ &= \_\_\_\_\_ \end{aligned}$$

8.) In 1990, there were 1,333 tornadoes in the U.S. If there were the same number of tornadoes for 12 years in a row, what would be the 12 year total?

9.) Insert parentheses to make the statement true.

$64 \div 2 \times 4 \div 2 = 4$

10.) A nursery sells plants in flats. There are 6 plants in each tray. Each flat has 6 trays. The nursery sold 18 flats on Saturday & 21 flats on Sunday. How many plants did the nursery sell in all?

11.) Maggie's Farm has 840 peaches ready to sell. If 105 peaches fit in each crate, how many crates can be filled? Draw a bar diagram to solve.

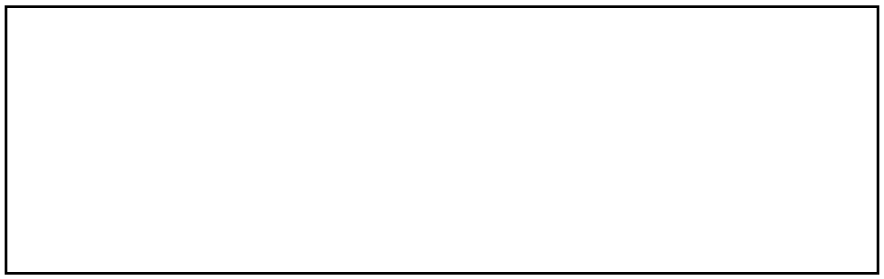
BAR DIAGRAM:

SHOW WORK HERE:

12.) What is the perimeter of the rectangle below <u>in inches</u>.

7 feet

4 ft.



Use the table to answer questions #13 - 17

School Supplies Sold					
school supplies	paper	book bags	notebooks	pens	pencils
number sold	616	64	432	572	784

13.) Pencils are packaged 16 pencils to a box. How many boxes of pencils did the store sell?

14.) The total sales of bookbags was $1,664. How much did each bookbag cost?

15.) Paper is delivered in cartons of 48 packs of paper each. If the store orders 624 packs of paper, how many cartons will they receive?

16.) The store wants to order at least as many pens as they sold. If the pens are sold in boxes of 24 pens each, how many boxes should they order? Explain how you found your answer.

WORK SPACE:

EXPLANATION:

_____

_____

_____

_____

_____

17.) School policy states that on field trips, there should be one adult chaperone for every 9 students. If 164 students are attending, how many adult chaperones are needed? Explain how you found your answer.

WORK SPACE:

EXPLANATION:

_____

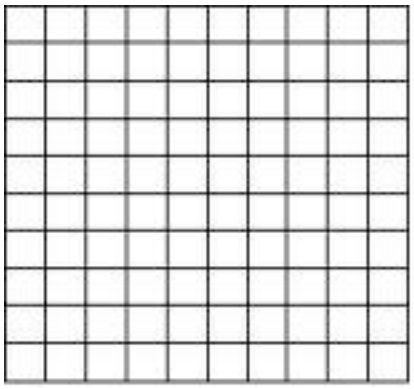
_____

_____

_____

_____

18.) Model the multiplication on 0.9 x 0.1 on the grid below. Then, write the product.



0.9 x 0.1 = _____

19.) An organic farm opened a farm stand to sell vegetables. Help the customers spend their money wisely.

Vegetable	Price
cucumbers	$0.50 each or $3.75 for a bag of 10
tomatoes	$1.98 for 1 lb or $3.55 for 2 lb
zucchini	$0.60 each or $5.59 for a dozen

A customer bought 8 cucumbers, 10 zucchini, and 1 pound of tomatoes. Based on the money he spent, show how the customer could have purchased more vegetables for less money.

20.) Samuel has a blue CD case that holds 44 CDs and a green case that holds 16 more CDs than the blue one. He has 22 CDs in the green case. How many more CDs can the green case hold?

Use the division algorithm. Show all work.

21.) $14.74 \div 2.2 =$

22.) $11.56 \div 0.34 =$

23.) Chris is buying a microscope for $228.72. She is paying in 12 weekly installments. How much will Chris pay each week?

24.) Joey bought a 72 ounce box of dog biscuits. How many pounds did he buy?

25.) A hardware store has 5 employees. Each employee works the same number of hours every week, and each one earns $10.50 per hour. Last week they worked a total of 167.5 hours. DRAW a picture and WRITE AN EQUATION to find how many hours each employee worked.

Picture/Model/Bar Diagram (your choice)

Equation - write & solve

26.) What is the value of $15 - 2x + 2$ when $x = 6$?

27.) Tom starts with $12 and saves $20 each week. Ruth starts with $15 and saves $20 each week. Complete the chart to show how much money each has saved at the end of each week.

	Tom's savings	Ruth's savings
start	$12	$15
week 1		
week 2		
week 3		
week 4		

What is the relationship between how much money each has at the end of each week?

_____

_____

_____

28.) Simplify this expression: 8 • (36 ÷ 12) • y

29.) Gerry has a coupon for $3 off the price of an item. If p represents the original price of a shirt, write the expressions that tells Gerry's cost, before tax, when she used the coupon.

30.)

x	y
112	73
96	57
62	23
45	??

Rule (write as an equation) :_____

What number is missing in the function table: _____

31.) Dena is biking down 9/10-mile bike trail. She stops to greet a friend after biking 1/3 of a mile. How much farther does she need to travel? DRAW a picture and WRITE an equation to solve.

Picture/Model/Bar Diagram (your choice)

Equation - write & solve

32.) A green shake is 8/9 yard long. A garter shake is 13/18 yard long. How much longer is the green shake than the garter?

33.) a.) Peter is distributing pamphlets about dog care and samples of dog biscuits. The dog biscuits come in packages of 12 and the pamphlets are in packages of 20. What is the smallest number of samples & pamphlets he needs to distribute without having any left overs?

b.) How many packages of dog biscuits & pamphlet will Peter need?

34.) Cereal can be a good source of protein. How many quarter cups of cereal are there in 6 1/4 cups?

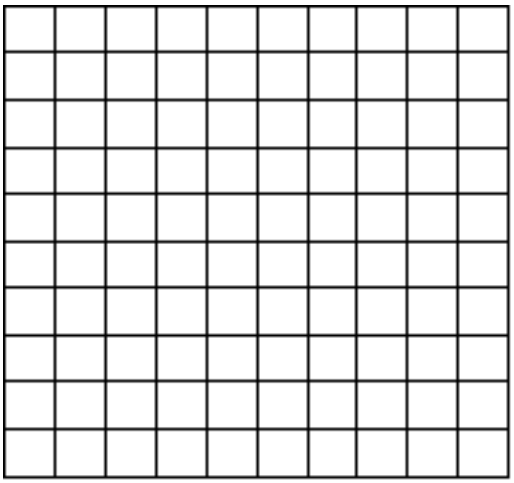
35.) Make a line plot & find the average of the data.

Data: 1/4 cup, 1/4 cup, 1/2 cup, 3/4 cup, 1/4 cup, 1/4 cup 1/4 cup, 1/2 cup, 1/4 cup, 3/4 cup, 1/4 cup, 3/4 cup

LINE PLOT:

The average amount of water in a beaker is _____ cup.

36.) Draw in the x-axis and y-axis. Label the origin. Then, plot the following ordered pairs: (8,5) , (1,3), (0,5) , (3,0)



37.) What is the best estimate for $6\ 1/2 - 4\ 2/3$?

38.) If one side of an equilateral triangle is $2\ 1/8$ inches long, what is the perimeter?

39.) Ricky needs 3 1/4 cups of sugar to make muffins. He already has two and half cups. How many more cups of sugar does he need?

40.) Express 18/4 as a mixed number.

41.) A board is 2 feet long. How many 1/4 foot long pieces can be cut from the board? DRAW a model & WRITE an equation.

Picture/Model/Bar Diagram (your choice)

Equation - write & solve

42.) Jason and his sister are going to install carpet in their bedrooms. Jason's bedroom is 10 ft by 12 ft. His sister's bedroom is 9 ft by 15 ft. Which bedroom will have more carpet? How much more?

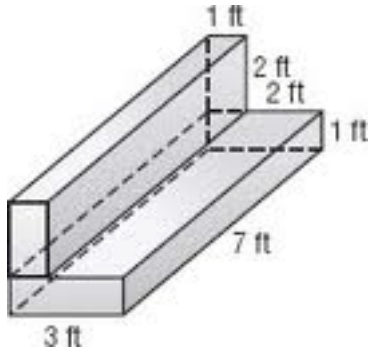
If carpet costs $4 per square foot, how much will it cost to carpet Jason's bedroom?

43.) The world's smallest gecko is 3/4 inches long. An adult male Western Banded Gecko is 7 1/3 times as long. How long is a Western Banded Gecko?

44.) A rectangular poster is 1/4 yard wide by 3/4 yard tall. What is its area?

45.) Mrs Smith made a pan of brownies. Half of the pan was left after lunch for the four members of the camera club to share equally. What fraction of the pan of brownies did each person get?

46.) Find the total volume.



47.) Adam has 50 one-inch cubes. The cubes measure 1 inch on each edge. Adam wonders how many rectangular prisms, each with a different-size base, that he could make with all of the one-inch cubes.

48.) Ed has a drink cooler that holds 10 gallons of water. He is filling the cooler with a 1 quart container. How many times will he have to fill the quart container to fill the cooler?

49.) A shape has both pairs of opposite sides parallel. What shape could it be?

_____

What questions could you ask to find out more about the shape? You must have at least 2 questions.

50.) A shape is a parallelogram and a rhombus. Could it be a square? Explain your answer.

_____

_____

_____

_____