Name: _____

Summer Math Packet for students entering 5th grade

PLEASE SHOW ALL WORK

1.) The number 57,733 contains two sets of digits in which one digit is ten times as great than the other. What are the values of the digits in each set?

2.) Write the number 85,708 in expanded form.

3.) The sale prices for 3 homes are $212,599 , $209,699 , and $220,499. Write the home prices in order from greatest to least.

4.) The height of the Willis Tower is 1,450 feet. The Petronas Towers in Malaysia are each 1,482 feet tall. Which is taller? Explain how you know. Use Complete sentences and the correct math vocabulary.

5.) Emily read a 210 page book in 7 days. She read the same number of pages each day. Write the number sentence that shows how to find the number of pages Emily read each day. Then solve. (label answer)

6.) Marcie's dog weighs 60 pounds. Sue's dog weighs 43 pounds. How much more does Marcie's dog weigh than Sue's dog? Solve this problem by using a bar diagram.

7.) Vera went on a 3 day trip in which she traveled 336 miles the first day, 423 miles the second day, and 357 miles on the third day. Is 300 or 400 a more reasonable estimate for about how far she went on each of the 3 days? Explain your reasoning in complete sentences.

8.) If you grow 3/4 of an inches each month for a year. How many inches did you grow in a year? If you are 3 ft 6 inches now, how tall are you at the end of the year?

9.) Maria knows there are 24 hours in one day and 7 days in one week. So, she figured out that there are 168 hours in one week. Is her answer reasonable? Explain why or why not.

Use the following information to answer questions #10 - 11
You are going on a three-day camping trip in the Grand Crayon. The chart shows the weights of some equipment you may need. Each person must take at least 2 water canteens and 3 food tins on the trip.

Equipment	Weight (lb)
water canteen	1
food tin	2
compass	1
shovel	5
binoculars	3
tent	8
chair	10
pillow	2
extra clothes	7
cooking pots/pans	30
sleeping cushion	4

10.) You are going to hike alone & carry a backpack. The backpack can hold up to 25 lb. What equipment will you take on the trip? Remember what you have to take.

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11.) You & 4 friends are taking a donkey on the trip. The donkey can carry 180 lb. You will not take backpacks. You will need 2 tents. What equipment will you take on this trip?

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12.) You need 2 1/2 cups of raisins for a recipe. If you want to double the recipe, how many cups of raisins will you need?

DRAW A MODEL

WRITE THE EQUATION THAT REPRESENTS YOUR MODEL

13.) Ben has 4 jars that he wants to fill with pennies. If he puts 231 pennies in each jar, how many pennies does he have all together?

14.) Find 3 x 1,789. How is multiplying a 3 digit number like multiplying a 4 digit number?

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15.)
a.) Find the product of 6 and 4,296

b.) Explain how you would estimate to check if your answer is reasonable.

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16.) The 1st memory card was sold in 1998. How many images can seven 32-MB memory cards hold? Use a bar diagram to model this situation and then solve it.

17.) Write & solve your own problem multiplying a 4-digit by 1-digit number with a product between 8,000 and 9,000.

18.) Four friends bought a present for Joan which was $36. How much less would each friend pay if 6 friends shared the cost equally rather than 4?

19.) Use the Distributive Property to find 3 x 46.

20.) Use mental math to multiply:
a.) 30 x 70 = _____   b.) 600 x 7 = _____

c.) 500 x 30 = _____   d.) 40 x 50 = _____

21.) To win a game, you need a product that is as close to 1,600 as possible. You can choose 2 factors from the numbers 18,42, 56, and 81. Which numbers can you select so that the product is closest to 1,600? Ask your parents to try this with you - see who can find it the fastest.

22.) Miss Smith has 12 weeks to practice for a running race. Over the course of one week, she plans to run 17 miles. How many miles will Miss Smith run all together?

23.) There are 52 weeks in 1 year. How many weeks are in 12 years?

24.) Dave plans to retile his porch floor. He wants to buy 25 black tiles and 23 white tiles. Each tiles costs $16. How much money will it cost Dave to retile his porch floor?

25.) Jim has 3,000 tickets for rides at the school carnival. Jim needs to pack small plastic bags with 8 tickets in each bag. About how many bags will he need?

26.) Jay has 14 trophies and 4 shelves. He wants to put the same number of trophies on each shelf. How many trophies will be on each shelf? How many trophies will be left over?

27.) Jim has 46 CDs. He wants to buy 5 cases that hold 8 discs. Explain WHY Jim needs to buy 6 cases to hold his 46 CDs

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28.) The class decides to have a picnic at an amusement park. There are 25 students in the class. Four students buy 35 tickets for rides. If the students get the same number of tickets, how many tickets does each student get? What is the meaning of the remainder?

Use order of operations to solve the problems #29 and #30.

29.) 6 ÷ 3 x 2 + 7 - 5   30.) 3 x 3 ÷ 3 + 6 - 3

31.) Write the expression represented by the problem and then simplify the expression.
There are 2 teachers and 6 rows of 4 students in a classroom

32.) 60 people will be attending a dinner party. Each table at the party can seat 8 people. How many tables are needed? Write & solve the number sentence you needed to find the answer and explain your reasoning.

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33.) Lace has 585 students. All 3 grades has the same number of students. How many students are in each grade?

Use the division algorithm for #34 -35.

34.) 417 ÷ 8   35.) 769 ÷ 3

36.) Max skated 2/5 mile, Carol skated 3/5 mile, and Pat skated 1/2 mile. Write these distances in order from least to greatest. Explain how you decided.

37.) Alicia wants to cut this board in 4 parts. She cut off the shaded part first. Did Alicia cut off 1/4 of the board? Explain.

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38.) Lynn says that all numbers that are multiples of 4 have a factor of 2. Is Lynn correct? Explain.

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39.) List all the factors of 36

40.) Decompose 7/8 into the sum of unit fractions.

41.) Write 3 equivalent fractions for 5/6

42.) Mark is making banana bread & muffins for a party. He use 2/5 bag of walnuts for the bread and 4/5 of a bag of walnuts for the muffins. How many bags of walnuts should Mark buy?

Equation you used to solve:

Explain how you know how many bags of walnuts to buy:

43.) Find the perimeter of a square with a side of 3/4 inches long.

Draw the square and label sides:

Perimeter = _____

44.) You use 4/6 of a sheet of construction paper to make decorations. How much of the sheet is left?

Draw each type of angle with a protractor and label			
acute angle	obtuse angle	right angle	straight angle

45.) Clare had 5/6 of a pound of almonds. She used 3/6 of a pound to make a cake. How many pounds of almonds were left? Simplify your answer.

46.) At the zoo, 7/12 of the zoo is animals, 1/12 is food courts, and 2/12 of the zoo is reserved for picnic areas. What fraction of the zoo is left for the new Dino exhibit.

DRAW A MODEL

WRITE AN EQUATION TO SOLVE

EXPLAIN YOUR REASONING

47.) Write each fraction as a decimal.
a.) 2/5   b.) 7/100   c.) 6/10   d.) 3/12

48.) Create a line plot and frequency table with the following data.

Length of pinkie finger in 4th grade
6 cm, 6 1/2 cm, 5 3/4 cm, 5 3/4 cm, 6 1/4 cm, 6 cm, 6 1/2 cm, 6 1/2 cm, 5 1/2 cm

line plot:

What is the difference between the greatest length and the smallest length?

_____

49.) One lap around a race track is 440 yards. If you ran around the track 3 times, how many feet would you run?

50.) Write 7 1/2 as the product of a whole number and unit fraction.