LAKE BRADDOCK SECONDARY SCHOOL SUMMER PACKET FOR RISING 8TH GRADE BRUINS

NAME _____

Summer Packet For Rising 8th Grade Bruins

Please answer each question in the space provided showing all your work. Place a box around your final answer.

1. Rose made 50 out of 80 baskets for her basketball team. What percent did she make?

2. Chris got 23 out of 25 questions on his science test. What percent did he get correct?

3. In Mrs. Robert's class, 18 out of 27 students are boys. What percent of the students in Mrs. Robert's class are GIRLS?

4. Write the fraction that is equivalent to 62.5%?

Order the numbers from least to greatest.

5. $\frac{11}{13}$, 50%, $\frac{8}{9}$, 4.2	6. 0.99, 70%, $\frac{1}{3}$, 1.3	7. $\frac{5}{8}$, 120%, $\frac{2}{7}$, 3.3

Solve each problem in the space provided showing all of your work.

8. $\frac{72}{9} + 3(1 + 5)$	9. $2^3 \div 4 \bullet 7 - 5 + 6$	10. $y + 4\frac{1}{5} = 7$

Please answer each question in the space provided showing all your work. Place a box around your final answer.

11. The Lake Braddock Middle School 8th grade class of 700 students is going to the Air and Space Museum. The standard school bus seats 66 students. What is the total number of busses that will be needed for this field trip?

12. You and your family have gone to a restaurant to eat. The bill for the food is $38.00. You want to leave a 15% tip. What is the total amount of the cost of the dinner?

13. Your team is having an end of the year celebration. A single batch of brownies uses $2\frac{3}{4}$ cups of flour. You want to triple the recipe for brownies and make brownies for the celebration. How much flour will you need for the brownies?

14. Alex earned 5% interest on the $265 that he put into his savings account for one year. How much money is in Alex's account if he has not withdrawn any of the money?

15. A Navy SEAL dives 34 feet below sea level, comes back up 15 feet, and dives down another 6 feet. How far below sea level is the Navy SEAL now?

16. What is the value of the expression: $x - (3x - 6)$ when $x = 4$?

17. What value for *y* will make the mathematical sentence $2y + 6 = 3y$ true?

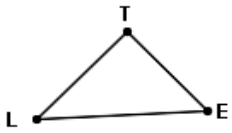
18. 48 math workbooks are packed in a carton. 15 cartons of workbooks are being shipped to Lake Braddock for the fall semester. How many workbooks are being shipped?

19. Red felt tipped pens cost $74.40 for 48 pens. How much do 100 pens cost?

20. You and your friend planted sunflowers seeds and are measuring their growth for a science project. Your plant grew 4 inches in three days. At that rate of growth, how much will your plant grow in one week? (Express your answer in fraction form.)

Solve each problem in the space provided to the right of the problem. Please put a box around your final answer.

21. Find the perimeter of this figure.

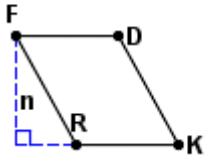


$\overline{ET}$=97 yd

$\overline{TL}$=108yd

$\overline{LE}$=144 yd

22. Find the area of this parallelogram.

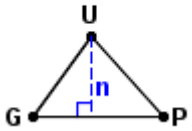


n=41m

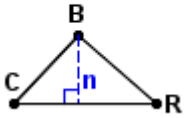
$\overline{RK}$=38mm

$\overline{KD}$=47mm

Find the area of each triangle showing all of your work in the space provided. Place a box around your final answer.

23. 

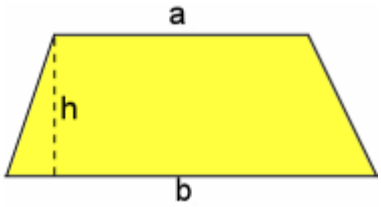
GU=54ft
PU=60ft
GP=72ft
N=44ft

24. 

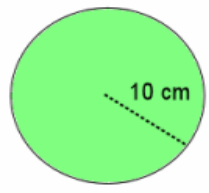
RB=20mm
CB=18mm
CR=27mm
n=13mm

Find the area of each solid to the nearest tenth. (use π= 3.14) Show your work in the space provided and place a box around your final answer.

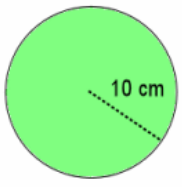
25. Find the area of the trapezoid.



a=9.9mm
b=15.1mm
h=24.3mm

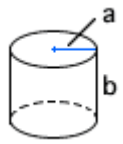
26. 

Find the area of this circle.

27. 

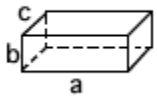
What is the circumference of this circle?

Find the volume of each solid to the nearest tenth. (use π= 3.14). Show your work in the space provided and place a box around your final answer.

28. 

a=30cm

b=59cm

29. 

a=18km

b=8km
c=5km

30. A Quaker oatmeal box in the shape of a cylinder has a diameter of 6 inches and a height of 20 inches. How much oatmeal could be stored in the container? Hint use volume.

Please answer each question in the space provided showing all your work. Place a box around your final answer.

31. Volume
Joel is going to build a stone fence for a neighbor. It will be 80 feet long, 5 feet high, and 2 feet wide. How many cubic feet of stone will it take to build the fence?

32. Fractions
There are 12 pieces in a large pizza, Andrew said, "If each person gets $\frac{1}{6}$ of the two pizzas, how many slices will each person get?

33. Discounts

Winter sweaters are on sale at a terrific price, 70% off the original price. Both Bobby and his mother found sweaters with an original prices of $48 each. What do they pay for both sweaters?

34. Statistics

There are five ostrich farms in a certain county. One farm has 212 ostriches, the second farm has 180 ostriches, the third farm has 112 ostriches, a smaller farm has 92 ostriches, and the smallest farm has 46 ostriches. What is the median number of ostriches on a farm?

35. Percentages

A very successful professional coach had only one losing season in 20 years of coaching. He won 853 games and lost 587 games. What was his percentage of wins?

36. In a survey, 200 middle school students were asked what their favorite subject is. Here are the results:

Favorite Subject	Number of students
Math	37
Science	51
English	59
History	33
Creative Writing	20

What percent of the students favored both Math and Science?

37. James went bowling. His scores were 78, 52, 88, 105, 48 and 65. Find the mean, median and mode.

38. When Al's height is added to this data set, the mean will be 66 inches. What is Al's height?

Name	Height (inches)
Brad	70
Leticia	62
Mira	67

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39. What is the lower quartile of the following data? 12, 35, 8, 18, 37, 15, 21, 25

40. Using the above data, what is the upper quartile?

41. Using the above data again, calculate the mean?

42. What are the next two terms in the following arithmetic sequence?

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

43. Examine the pattern of numbers below. If the pattern continues, what are the next three numbers in the sequence?

1, 4, 9, 16, 25, 36, 49, ____, ____, _____

44. Ryan's first-period class begins at 8:10 and ends at 9:00. His second period class begins at 9:05 and ends at 9:55. His third period class begins at 10:00 and ends at 11:05. If this pattern continues, when does Ryan's fourth period class begin and end?

45. Solve the following equation:

$-4x + 6 = -18$

46. The table below shows the relationship between z, Zack's age, and d, his dog's age (in dog years).

Z (Zach's age)	10	11	12	13
D (his dog's age)	7	14	21	28

How old will Zack's dog be when Zack is 14?

47. Solve the following inequality:

$X - 6 < -12$

48. Brittney is $\frac{1}{4}$ Caroline's age. If Brittney is 2 years old, how old is Caroline?

49. Gary gets paid $8.25 an hour at his job. Use the equation $66 = 8.25\ x$ to determine the number of hours Gary must work to save up enough money to buy a $66 road bike.

50. Translate " 8 less than twice a number " and determine whether it is an expression . or an equation.