My 4ᵗʰ Grade Summer Math Practice Booklet

Name _____

Number Sense

1. Write "five tenths" as a fraction and as a decimal.

    fraction _____   decimal _____

2. Write the number "four hundred sixty-seven thousand,
    three hundred twenty-one" using numbers instead of words.

    _____

3. Round 675 to the nearest hundred.   _____

4. List all the factors for the number 20. Remember, factors are
    numbers that you multiply together to get the given number.
   Hint: there are 6 factors for the number 20!

    _____ _____ _____ _____ _____ _____

5. Is the fraction $\frac{8}{10}$ closest to $0, \frac{1}{2}$ or 1? _____

6. The distributive property is used to make math problems
    easier. If we were doing 5 x 47, we could do 5 x 40 + 5 x 7.
    Give the answer to this problem using the distributive
    property. Then give the answer to this problem using regular
    multiplication. Are the answers the same?

	47
5 x 40 + 5 x 7 = _____ ___ + ____ = ____	x 5 Are they the same? _____

7. A bus holds 20 people. There are 45 people waiting to catch the bus. How many buses will be needed? _____

8. Michael has 3 quarters, 2 dimes, and 3 nickels. He buys two packs of gum for $0.45 each. How much money will Michael have left over? Show your work!
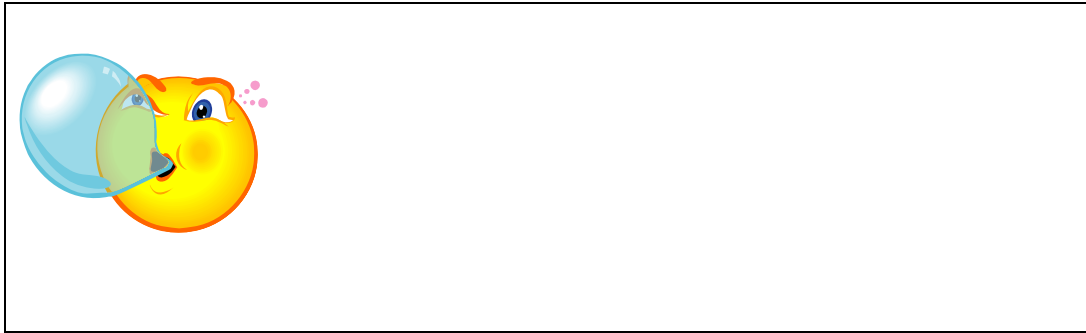
9. **Estimate** the result of adding $3.97 + $8.15. _____

10. When adding fractions they must have the same denominator (bottom number). You add the numerators (top numbers) together and keep the common denominator. Add the fractions below.

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

11. Show or explain how to do 400 ÷ 10 mentally.

_____

12. Hawa is having friends over. She purchased 4 boxes of ice cream bars as treats. Two of the boxes cost $2.00 each. The other two boxes cost only $1.50 each. How much did Hawa spend on the 4 boxes of ice cream bars total? Show your work!

13. Mr. Simmerman was adding up how much money he spent at the grocery store. His receipt was several inches long. Which method of computation would be best for Mr. Simmerman to use?
   a. mental math
   b. pencil paper
   c. calculator

14. Complete the following multiplication problem: 376
                                                    x 5

Measurement

15. A large pitcher holds 32 cups of water. There are 16 cups in one gallon. How many gallons does the large pitcher hold?

16. Perimeter is the distance around the outside of an object. Area is the amount of material it takes to cover a 2-D or 3-D object. Volume is the amount of space inside a 3-D object. Answer the following using the terms perimeter, area, and volume:
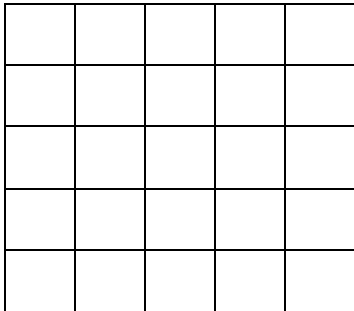
      When carpeting the floor, you need to know the _____ of the room.

      When filling a swimming pool, you need to know the _____ of the pool.

      When putting a fence around the outside of your backyard, you would need to know the

      _____.

17. Which tool would you use to measure perimeter?
   a. gallon container
   b. tape measure
   c. 3-D centimeter cubes

18. Find the area of this grid.   Area = _____cm²
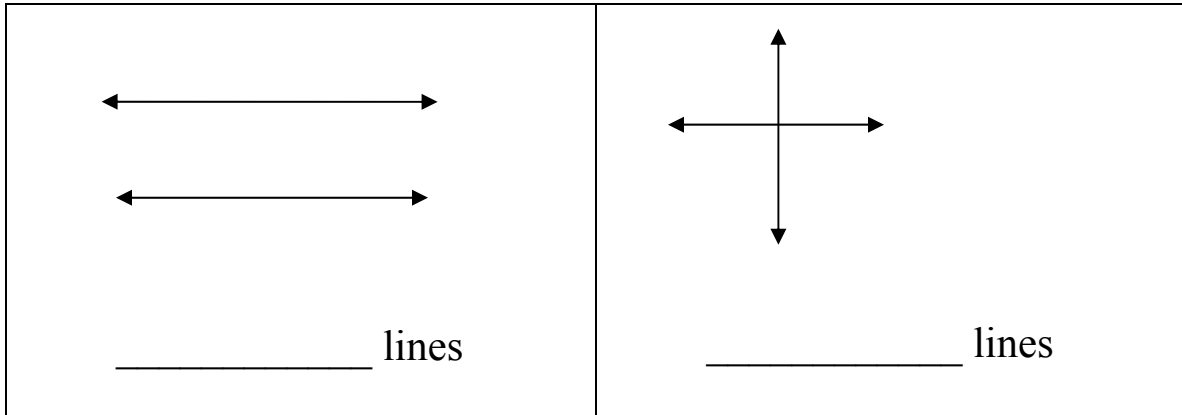
19. There are _____ quarts in one gallon.

20. There are 12 inches in one foot. How many inches are in 4
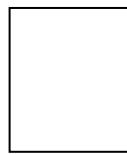
   feet? _____

Geometry and Spatial Sense

21. Identify these lines as parallel or perpendicular.

_____ lines   _____ lines

22. Write one similarity (same) and one difference for the
    following shapes.

    Similarity _____

    Difference _____
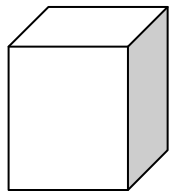
23. Give one way a square and a rectangle are the same and one
    way they are different.

    Same: _____

    Different: _____

24. This triangle is a _____ triangle because it has
    one 90° angle.
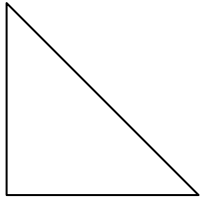
25. An exact location is called
    a. a line
    b. a plane
    c. a ray
    d. a point

26. Plot the ordered pair (3, 1).

    3
    2
    1

    0   1   2   3

27.   This transformation is called a

                                             _____.

28.

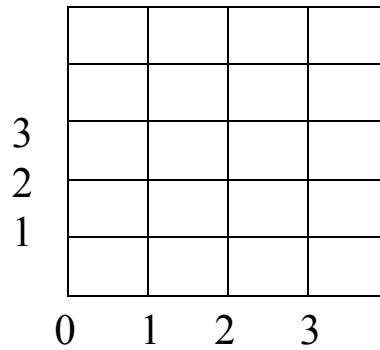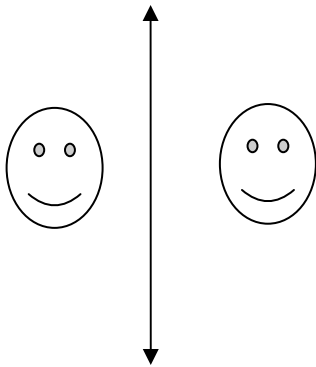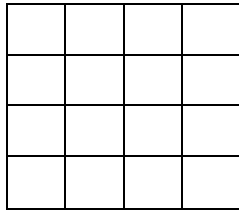Find the perimeter of this shape.

_____ units

Patterns, Functions, and Algebra

29. Identify the pattern and show what would come next in the sequence.

♫♪♪ ☻ ☻   ♪♫♪♪ ☻ ☻ ☻   _____

30. Describe the rule for the pattern above.

_____

_____

31. Identify the pattern and complete the table below.

x	y
2	10
3	15
4	___
5	___

32. Write the rule for the table above.

y = ____ times x

33. Use a symbol $(<, >, \text{ or } =)$ to write the equation "x is less than 35".

_____

34.   If 3 multiplied by x = y, what happens to y when x gets larger? Does y
       a. stay the same
       b. get larger
       c. get smaller

Data Analysis and Probability

35.   How could you find out your neighborhood friends favorite summer activity?
       a. do a survey and ask them
       b. research it in a book
       c. ask someone that lives with you

36.   Kids Favorite Summer Activity
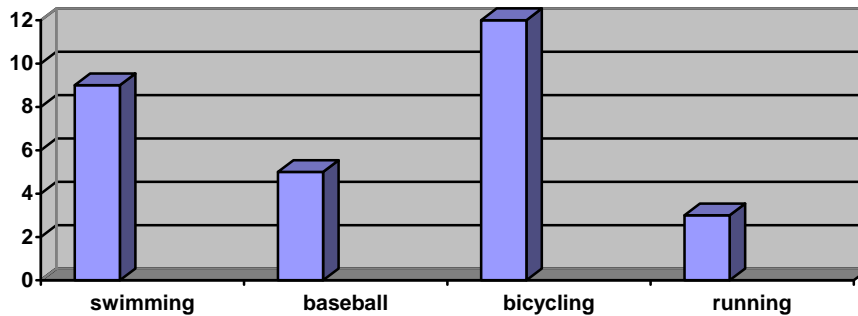
How many more kids like bicycling than baseball? ____

37. This diagram with overlapping circles is a way to show data

and is called a _____ diagram.

38. What type of graph is shown above in question #2?
       a. line graph
       b. bar graph
       c. pictograph

39. A spinner was spun 27 times. Of the 27 spins, it landed on the color red 25 times. What color do you predict the spinner will land on if you spin it again?

_____

40. What is the range (difference between highest and lowest number) of this data set?

```
                  x
      x           x                       range _____
      x   x   x   x   x
      1   2   3   4   5
```

41. What is the median (middle number) of this data set?

_____

42. What is the mode (most) of this data set? _____

43. A coin is tossed 12 times. Six times it lands heads-up and six times it lands tails-up. How likely is it to land heads-up on the next toss?
   a. as likely as not (equally as likely)
   b. not likely
   c. for certain

44. There are 10 marbles in a bag. One marble is blue. How likely are you to draw the blue marble out of the bag?

   a. likely
   b. impossible
   c. not likely

45. When tossing a number cube (dice), how likely is it to roll the number 7?
   a. likely
   b. impossible
   c. as likely as not

46. The weather forecast says there is a 90% chance of rain today and a 10% chance of rain tomorrow. Which day is rain likely, today or tomorrow?

   _____

47. Mrs. Buty has 3 shirts (red, blue, and green) and 2 pair of shorts (black and blue) to choose from in her suitcase. List all the outfits she can make with these 3 shirts and 2 pair of shorts.

Congratulations, you have finished your 4th Grade Summer Review Booklet!

Please sign your name and the date you finished below. Parent signature is requested as well. Please bring the completed booklet back to school when you return in August for "Meet the Teacher" or on the first day of school.   Thank you for practicing math over the summer. This will help us get the year off to a GREAT START!

_____   _____

(Student Signature)   Date

_____   _____

(Parent/Guardian Signature)   Date