# My $5{ }^{\text {th }}$ Grade Summer Math Practice Booklet 



Name

## Number Sense

1. Write a ratio (fraction) comparing the number of rectangles to the number of triangles. Then write a ratio (fraction) comparing the number of triangles to the total number of figures.


Number of rectangles $\qquad$
Number of triangles
Number of triangles $\qquad$
Number of total shapes
2. Show why $\frac{7}{8}$ is equivalent to $\frac{14}{16}$.
3. Write the decimal and percent equivalent for the fraction $1 / 4$.

$$
1 / 4=0 . \quad=0 / 0
$$

4. The fraction $5 / 8$ is closest to $\qquad$ .
a. 0
b. $1 / 2$
c. 1
5. A perfect square is a number which is a value of another number to the second power. An example is the number 4 because $2^{2}=4$. Another example is the number 25 because $5^{2}=25$. Give your own example of a perfect square.
6. A temperature of $-7^{\circ}$ is $\qquad$ degrees below 0 . A temperature of $37^{\circ}$ is $\qquad$ degrees $\qquad$ 0.

7. When adding $37+29+63$, it is best to use the
$\qquad$ property of addition because adding 37 to 63 to get 100 then adding 29 to get 129 is easier than adding in the original order given. (Property choices are associative, commutative, distributive, and identity)
8. If you wanted to check your answer to a division problem, you would use the inverse operation of $\qquad$ .
9. Use order of operations to solve the following problems. (Remember PEMDAS - parentheses, exponents, multiply/divide, add/subtract)

$$
\begin{aligned}
& 37+15 \times 3-12= \\
& 2^{2}+5 \times 6-10=
\end{aligned}
$$

10. In order to add or subtract fractions, they must have denominators.
(Think about this: $2 / 5+1 / 5=3 / 5$ )
11. Show how to add the decimals $4.5+12.3$ by lining up the decimal points.
12. Add! $3 / 8+5 / 8=$ $\qquad$ .
13. Estimate the cost of 8 balloons for $\$ 0.89$ each. Show your work!


## Measurement

14. An angle is measured in $\qquad$ . Give the measure for each angle below.

15. 



Determine the distance from point A to point B. $\qquad$ units

Determine the distance from point C to point A. $\qquad$ units
16. When carpeting a room, we would need to know the room's
$\qquad$ . When filling a swimming pool, we would need to know the pool's $\qquad$ .

(Choices are perimeter, area, and volume.)
17. Perimeter is always given in $\qquad$ , area is always given in $\qquad$ units, and volume is always given in $\qquad$ units.
18. The distance around the field is 393 feet. How many yards is this? $\qquad$ (Remember how many feet are in one yard!)
19. A rectangle can be divided into 2 congruent triangles. This means a triangle's area is half of a rectangle's area when the length (base) and the width (height) are the same. If a rectangle measures 3 feet by 4 feet, find the area of the rectangle and then the area a triangle with the same dimensions.


Area of rectangle $=$ $\qquad$ square feet Area of triangle $=$ $\qquad$ square feet
20. Draw an obtuse angle below. Estimate the degree of your angle.

Estimate in degrees: $\qquad$。

## Geometry

21. Label the radius of this circle. The diameter is $\qquad$ times the radius.
22. Draw a pair of pal

perpendicular lines below.

| Parallel | Perpendicular |
| :--- | :--- |
|  |  |
|  |  |

23. The $\qquad$ is where two rays of an angle meet. The inside of an angle is the $\qquad$ angle and the outside is the $\qquad$ . (Choices are interior, exterior, and vertex.)
24. Congruent figures must have the same exact $\qquad$ and

25. The interior angles of a triangle always add up to
$\qquad$ ${ }^{\circ}$.

These two shapes are
26. In the ordered pair $(-7,5)$, the $x$ value is a $\qquad$ number. Negative numbers are below $\qquad$ on the number line.
27. The measure of an angle is determined by the rotation of one side to the next side. What is the angle of rotation for the sides of this figure?


○
28. What 3-D object will result from folding this 2-D net?


Patterns, Functions, and Algebra
29.


Identify the rule used!
$\qquad$
30. Finish the table and identify the rule.
$y=$ $\qquad$

| $x$ | $y$ |
| :--- | :--- |
| 1 | 6 |
| 2 | 12 |
| 3 |  |
| 4 |  |
| 5 |  |

31. In the rule $d=r \cdot t, d$ stands for distance, $r$ stands for rate or speed, and $t$ stands for time. Why are variables used in formulas like this one? Remember where the word "variables" comes from!
32. In the equation $\mathrm{m}<\$ 35.00$ where m stands for money, we interpret this as having $\qquad$ than $\$ 35.00$.
33. Predict what comes next in the pattern:

## 

34. $\mathrm{y}=2 \mathrm{x}-7$ As x gets larger, y $\qquad$ .
(Choices include stays the same, gets larger, gets smaller.) Substitute values in for x to help you!

## Data Analysis and Probability

Severe Storms
35.

| Year | Frequency | Cumulative Frequency |
| :---: | :---: | :---: |
| 2006 | 17 | 17 |
| 2007 | 30 | 47 |
| 2008 | 27 | 74 |

Using the cumulative frequency table above, tell which year had the greatest number of severe storms. $\qquad$
36. When showing progress over time (such as YPP progress), a
$\qquad$ graph is best.
37. Most Popular iPods for Ages 15-29


Use this bar graph to answer the following questions:
a. The most popular iPod for ages $15-19$ is the
b. $\qquad$ more 25-29 year olds prefer the iPod Touch over the iPod Nano.
38. To find out the most popular summer activity of your classmates, you would conduct a $\qquad$ and ask the question " $\qquad$
39. The first 5 people surveyed said their favorite summer activity was swimming. Would you predict the next person surveyed would also say swimming was their favorite summer activity? $\qquad$ How would your prediction change if the next 15 people said riding their bicycle with friends was their favorite summer activity?
40. Find the mean, median, mode, and range of the following set of numbers. Show your work!

$$
37,41,52,37,19
$$

$$
\begin{array}{ll}
\text { Mean }=\ldots & \text { Median }= \\
\text { Mode }= & \text { Range }=
\end{array}
$$

41. When tossing a coin twice, the possible outcomes are:

$\qquad$
42. What is the probability of tossing a number greater than the number 4 when tossing a regular number cube? $\qquad$
43. A probability of $\qquad$ means the event is "as likely as not" or "equally as likely" to happen as not happen.
Flipping heads on a coin is $\qquad$ as flipping tails on a coin.
44. Theoretical probability is what $\qquad$ happen based on theory and experimental probability is what
$\qquad$ happen when you perform the experiment.
45. If you make 6 out of 10 baskets, your probability of making the next shot would be $\qquad$ . If shooting 30 times, how many times would you expect to make a basket?


Congratulations, you have finished your $5^{\text {th }}$ 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

