## Summer Math Calendar for Students Entering $7^{\text {th }}$ Grade

| 1. Draw a |
| :--- |
| vertical number |
| line and represent |
| the following |
| integers on it: |
| $-7,2,0,-3,5,10$ |
|  |

8. Write an expression to represent the following: the product of 6 and a number decreased by 11 . Evaluate the expression for $\mathrm{n}=12$

## 15. If a

 basketball has a diameter of 24 cm, what is its volume?22. Kenndi has a rectangular box that is 6 cm wide 3 cm long and 2 m deep. How much wrapping paper will she need to cover the entire box?
23. Set up a proportion and use it to find out what percent of 75 is 40 .

24. Evaluate the following expressions for $\mathrm{x}=7$ $2 \mathrm{x}-13$
X +27
$(5+x) / 2$
25. A pyramid has a volume of 7 cm cubed, what is the volume of a rectangular prism with the same dimensions?
26. The ratio of apples to oranges in a fruit bowl is 1 to 4. If there are 5 apples in the bowl how many oranges are there?
27. Use the following set of clues to determine a secret number:
1) 2 digit
2) 13 is a factor 3) sum of the digits is 11 Write your own set of clues to determine your secret number
10. Write a story problem that $2 x+3=11$ could be used to solve.
11. In Ms. Ash's class there are 14 boys and 16 girls. What is the ratio of boys to total number of students in the class?
12. Which car is traveling faster?

Car 1: 300 miles in 5 hours

Car 2: 250 miles in 4 hours
4. For your birthday you get 6 pints of ice cream and you serve $3 / 4$ pint to each of your guests? How many guests can be served at your party?

11. Find the difference between 203.45 and 12.345.

## 18. On a

blueprint of a house, the scale is 0.25 inches equals 2 feet. How wide is the kitchen if it measures 1.5 inches on the blueprint?
25. If you bought 3 CDs, each costing \$12.99, and paid with a $\$ 50$ bill, what would your change be? (Bonus: If you had to pay $6 \%$ sales tax also, what would your change be?)
5. You decide to make cookies. The recipe calls for $1 / 2$ cup of butter, $3 / 4$ cup of chocolate chips and $3 / 8$ cups of chopped almonds. When you combine these ingredients how much mixture do you have? If you decide to triple the recipe how much butter will you need?
12. Is 3 a solution to $x>9$ ? How do you know? Give a solution to the inequality? Is this the only answer?

## 19. Find the

 multiple of 3,11 , and 22 that is less than 100.26. Write the ratio of 7 girls to 5 boys in two other ways.

27. In a class of 246 graders, $25 \%$ walk to school, $1 / 8$ bike to school, $1 / 3$ ride the bus and the rest carpool. What percentage $f$ the students carpool. Write the number as a decimal and fraction. How many students is this?
28. If a cube is 3 cm on each edge what is the volume of the cube? If the edge length is doubled what is the new volume?
29. For every 4 fish in her pond Jasmine must have five plants. What is he maximum number of fish she can have if she has 75 plants?
30. You surveyed 10 people and six of them prefer lemonade to water. Write the number of people who prefer lemonade as a decimal and those who prefer water as a percent.
31. Is $2 x+4=2(x+1)$ ?

Prove it
14. A cylinder and a cone have the same radius and height. What is the difference between the volume of both the cylinder and come?
21. A race car can travel 2 laps in 5 minutes. At this rate how long will it take him to travel 75 laps?
28. The ratio of computers to calculators is 5 to 9 Find the number of computers if there are 72 calculators?

