Name: $\qquad$

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

## Directions:

- Complete this assignment WITHOUT the use of a calculator.
- All work must be shown to receive credit.
- Write answers in the space provided.
- Complete this assignment before the first day of class and be ready to hand it in, fully complete, on the first day of class.

Note to the Student:
The purpose of this assignment is to review topics that are essential to your success.
Please make sure that you complete this assignment no earlier than a month before school starts. You want to make sure to give yourself time to identify and relearn concepts you have difficulty with but you don't want to do it too early in the summer that you forget the material.

This assignment will have some weight in your first quarter grade, to be determined by the teacher of your class.

We hope you have a great summer and look forward to seeing you in the fall!
The Birch Math Department
Please read and sign the Honor Code statement below before starting the work.
I pledge on my honor to uphold the values of the Birch Wathen Lenox School an d always act with integrity, loyalty and civility. I will be honest in my academic work and in my relationships with peers and teachers. I will remain loyal to those things I know, and am taught are right and just. I will be kind, respectful, and charitable to all members of my school community, striving to be a role model for others.

Signature: $\qquad$

Write the letter of the correct vocabulary term on the line next to its definition.
(a) Variable
(b) Sum
(c) Quotient
(d) Estimate
(e) Product
(f) Difference
(g) Variable Expression

1) $A$ $\qquad$ consists of numbers, variables, and operations to be performed.
2) The result of dividing one number by another is a $\qquad$ .
3) The result of subtracting two numbers is a $\qquad$ .
4) A $\qquad$ is a symbol, usually a letter that represents a number.
5) The result of adding two numbers is a $\qquad$ .
6) To $\qquad$ means to approximate a value.
7) The result of multiplying two numbers is called the $\qquad$ .
8) Find the perimeter and area of the square. Be sure to include units in your answer.

9) Find the perimeter of this triangle.

10) Write $12^{3}$ in words. Then calculate the answer.
11) 

What is the amount of milk in a full jug?
a. $\quad 40 \mathrm{~L}$
b. 296 mL
c. 1 L
d. $\quad 3750 \mathrm{~mL}$

Explain the reason for your choice. Why is it the most logical answer?
12)

The length of a pen is ?.
a. $\quad 16 \mathrm{~cm}$
b. 16 mm
c. 16 km
d. 16 m

Explain the reason for your choice. Why is it the most logical answer?
13) a) List all factors for 36 .
b) Make a factor tree for 230 .
14) Find LCM of 12 and 30.

## Round the decimal as specified.

15) 0.0075 (ones)
16) 7.402 (hundredth)
17) 8.8993 (hundredth)
18) 11.708 (tenth)
19) $5 \div 0.00084$
20) $\frac{0.5}{2.3}$
21) $55.62 \div 0.9$
22) Eric's rectangular garden is $3 \frac{2}{5}$ feet long and $1 \frac{3}{4}$ feet wide. What's the area of his garden?
23) Stefanie stops by a kiosk in the mall and purchases some dessert to bring over to her friend's house. She buys $2 \frac{2}{3}$ pounds of jelly rings and $1 \frac{4}{5}$ pounds of cookies. How much does the dessert she purchased weight altogether.
24) $4.81 \times 100=$
25) $0.46 \times 1,000=$
26) $2.98 \div 100=$
27) PEMDAS- Order of operations
a)

$$
3 \times 6-(9-8)^{3}
$$

b)

$$
5 \times 2^{2}+32 \div 8
$$

c)

$$
-13+(-8)+(-12)
$$

28) Write the percent as a decimal and as a fraction in simplest form.
a) $64 \%$
b) $88 \%$
29) Write the fraction or decimal as a percent.
a) 0.09
b)
0.7
30) Find the percent of a number.
a) $30 \%$ of 150
b) $15 \%$ of 300
31) Evaluate each expression if $x=4$ and $y=-3$
a)

$$
|x+y|
$$

b)

$$
x+|y|
$$

32) Evaluate:
a)
$65-(-6)$
b)
$-6(3)(-5)$
c)

$$
\frac{-143}{-13}
$$

d)

$$
-1 \frac{7}{8} \cdot\left(-2 \frac{2}{5}\right)
$$

34) Solve each equation and check your answer.
a)
$y-29=-51$
b)

$$
13+t=-29
$$

c)

$$
\frac{h}{-11}=12
$$

d)

$$
29 t=-145
$$

e)

$$
3.2 c=9.6
$$

f)

$$
h+\frac{4}{9}=\frac{7}{9}
$$

35) Solve the proportion.
a)

$$
\frac{x}{18}=\frac{7}{36}
$$

b)
$\frac{5}{y}=\frac{7}{16.8}$
36) Graph and label each point on a plane.

A $(1,-2)$, $B(3,5) C(-4,4)$

37) a)

| The bar graph shows the lengths in miles of the Great Lakes. Lengths of bars represent lengths of lakes. |  | Lengths of the Great Lakes |
| :---: | :---: | :---: |
|  |  |  |
|  | ¢ ${ }^{400}$ |  |
|  | ${ }_{5} 300$ |  |
| Which is the shortest Great Lake? | $\text { 덩 } 200$ |  |
|  |  |  |
|  |  | Superior MichiganErie <br> Lake$\quad$ Huron Ontario |

b)

Use the graphs to answer each question.


1. How many archers scored 4 buli's eyes?
2. What was the most common number of bull's-eyes scored?
$\qquad$
38) 28 children voted on their favorite Indoor Games. Uno was the most popular choice. The results of voting can be seen below. Create a bar graph using the space below.
6 - Checkers
8 - Chess
9 - Uno
5 - Cards


## Mean, Median, Mode, Range

39) Jeremy goes bowling every week. His bowling scores are 89, 105, 122, 145, and 174. What is the mean of his bowling scores?
40) Ms. Carter gave a test to her science class. The grades were: $69,75,66,50,94$, 96, 89, 83, and 87 . What was the median test score?
41) Mr. Fowler gave a quiz to his history class. The grades were:
$99,94,88,76,98,83$, and 79 . What are the median, quartile 1 , and quartile 3 scores?
