

Name: _____

Date: _____

Summer Assignment for Students Entering 6th 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. It will be assumed that all of the topics covered in this assignment, and in your previous math courses, have been mastered and will not need explanation as we use them in the 6th Grade Math course.

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 trimester 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 and 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: _____

Topic 1: Multiplying and Dividing by 10s, 100s, 1000s, etc.

Divide by the values below and write your final answer as a decimal in the box provided.

- ***** IMPORTANT NOTE:** $\frac{162}{10}$ is the same as $162 \div 10$ ***

1) $\frac{79}{10} =$ <input type="text"/>	2) $\frac{90}{100} =$ <input type="text"/>	3) $\frac{1735}{1000} =$ <input type="text"/>
4) $\frac{56}{100} =$ <input type="text"/>	5) $\frac{326}{1000} =$ <input type="text"/>	6) $\frac{235}{10} =$ <input type="text"/>
7) $\frac{752}{100} =$ <input type="text"/>	8) $\frac{135}{1000} =$ <input type="text"/>	9) $\frac{.9}{100} =$ <input type="text"/>

Find the products (multiply) for the problems below. Write your final answer on the line provided.

- 1) $15 \times 100 =$ _____
- 2) $4.3 \times 10 =$ _____
- 3) $17.89 \times 1000 =$ _____
- 4) $8.1 \times 100 =$ _____
- 5) $0.24 \times 1000 =$ _____
- 6) $0.00578 \times 10 =$ _____
- 7) $900 \times 100 =$ _____
- 8) $2010 \times 10 =$ _____

Topic 2: Place Values and Rounding

Label the place value names of the following number:

3	6	2	.	1	8	9	6

Rounding

Round the above number to the following places:

- a) Ones: **362**
- b) Tenths: _____
- c) Hundredths: _____
- d) Thousandths: _____
- e) Tens: _____

Topic 3: Converting Fractions to Decimals

Convert the following values into decimals. Write your final answer in the box provided.

1) $\frac{27}{2} =$ <input type="text"/>	2) $\frac{3}{4} =$ <input type="text"/>	3) $\frac{18}{5} =$ <input type="text"/>
4) $\frac{7}{8} =$ <input type="text"/>	5) $\frac{13}{10} =$ <input type="text"/>	6) $\frac{47}{4} =$ <input type="text"/>
7) $\frac{2}{5} =$ <input type="text"/>	8) $\frac{29}{4} =$ <input type="text"/>	9) $\frac{35}{2} =$ <input type="text"/>

Topic 4: Adding and Subtracting Fractions

Add the following unlike fractions. Write final answer in the box provided.

1) $\frac{3}{8} + \frac{1}{4} =$

2) $\frac{2}{3} + \frac{8}{9} =$

3) $\frac{5}{6} + \frac{7}{12} =$

4) $\frac{4}{10} + \frac{3}{5} =$

5) $\frac{1}{2} + \frac{3}{4} =$

6) $\frac{2}{3} + \frac{1}{2} =$

7) $\frac{10}{7} + \frac{3}{2} =$

8) $\frac{4}{3} + \frac{11}{6} =$

9) $\frac{6}{5} + \frac{5}{3} =$

10) $\frac{5}{4} + \frac{10}{9} =$

11) $\frac{11}{4} + \frac{10}{8} =$

12) $\frac{9}{2} + \frac{7}{6} =$

Topic 5: Convert from Improper Fraction to Mixed Number and vice versa

Convert the improper fraction to a mixed number. Write your final answer on the line provided.

1) $\frac{11}{4} =$ _____

2) $\frac{28}{5} =$ _____

3) $\frac{23}{16} =$ _____

4) $\frac{83}{2} =$ _____

5) $\frac{117}{21} =$ _____

Convert the mixed number to an improper fraction. Write your final answer on the line provided.

6) $3\frac{3}{4} =$ _____

7) $1\frac{5}{6} =$ _____

8) $4\frac{1}{17} =$ _____

9) $2\frac{9}{10} =$ _____

10) $8\frac{7}{9} =$ _____

Topic 6: Multiplying and Dividing Unlike Fractions and Whole Numbers

Find the product or quotient of the values below. Write final answer in the box provided.

$$\frac{2}{5} \times \frac{5}{4} = \boxed{}$$

$$\frac{7}{8} \times \frac{6}{3} = \boxed{}$$

$$\frac{10}{5} \times \frac{1}{2} = \boxed{}$$

$$\frac{9}{7} \times \frac{2}{6} = \boxed{}$$

$$\frac{10}{9} \times \frac{3}{5} = \boxed{}$$

$$\frac{5}{6} \times \frac{10}{9} = \boxed{}$$

$$\frac{2}{5} \times 6 = \boxed{}$$

$$\frac{3}{4} \times 8 = \boxed{}$$

$$\frac{1}{6} \times 10 = \boxed{}$$

$$4 \times \frac{5}{7} = \boxed{}$$

$$3 \times \frac{1}{3} = \boxed{}$$

$$\frac{7}{10} \times 5 = \boxed{}$$

$$\frac{3}{5} \div \frac{9}{5} = \boxed{}$$

$$\frac{8}{7} \div \frac{4}{6} = \boxed{}$$

$$\frac{1}{2} \div \frac{6}{5} = \boxed{}$$

$$7 \div \frac{7}{9} = \boxed{}$$

$$\frac{9}{11} \div 36 = \boxed{}$$

$$12 \div \frac{4}{5} = \boxed{}$$

Topic 7: Multiplying and Dividing Decimals

Find the product or quotient of the values below. Write final answer in the space provided.

$$\begin{array}{r} 1) \quad 2.3 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 1.4 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 0.8 \\ \times \quad 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 9.5 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 4.4 \\ \times \quad 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 6.7 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 1.7 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 2.2 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 3.9 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$(a) \quad 2 \overline{) 3.6}$$

$$(b) \quad 7 \overline{) 4.9}$$

$$(c) \quad 4 \overline{) 13.2}$$

$$(d) \quad 9 \overline{) 8.1}$$

$$(e) \quad 5 \overline{) 23.5}$$

$$(f) \quad 6 \overline{) 21.6}$$

$$(g) \quad 3 \overline{) 7.8}$$

$$(h) \quad 4 \overline{) 33.6}$$

Topic 8: Order of Operations

Evaluate the following expressions. Write final answer in the box provided.

1) $6 + 42 \div 2 - 15$

Ans =

2) $36 - 10 \times 2 \div 5 - 11$

Ans =

3) $25 \times 2 - 42 \div 6 + 18$

Ans =

4) $3 + 32 \div 8 - 9$

Ans =

5) $8 + 9 - 2 \times 3$

Ans =

6) $4 - 6 \times 2 \div 2 + 2$

Ans =

Topic 9: Word Problems

Complete the following word problems. Put a box around your final answer or write it on the space provided.

- 1) Sara poured $1\frac{1}{8}$ cups of lemonade into each of 5 glasses. What is the total number of cups Sara poured into the 5 glasses?

- 2) Allen ran 5.4 miles on Monday, 3.28 miles on Tuesday, 2.1 miles on Wednesday, 8.22 miles on Thursday, and 5 miles on Friday. How many miles did Allen run altogether in the week?
- 3) Adam needs to drive a distance of 372 kilometers to Massachusetts to attend a seminar. He stops to grab a quick bite to eat after he covers one-third of the total distance. How many more miles does Adam need to drive to reach his destination?
- 4) A one-year subscription to National Geographic Magazine costs \$37.00. If you were to buy 12 issues of the same magazine in Duane Reade for a year, you would end up spending \$72.88. How much will you save if you get a subscription instead?
- 5) A recipe calls for a quarter of a cup of sugar to make a chocolate brownie in a mug. How many mugs of brownies can you make with $1\frac{3}{4}$ cups of sugar?