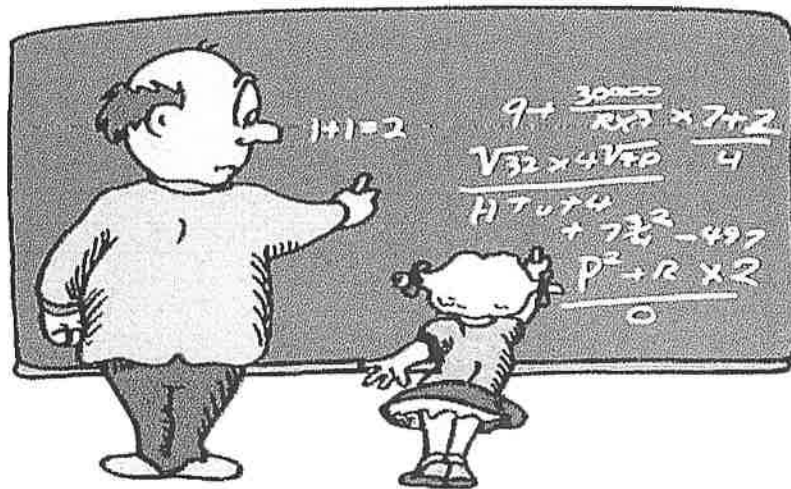


BELLEVILLE MIDDLE SCHOOL
SUMMER MATH PACKET
FOR STUDENTS ENTERING GRADE 6



You will receive a **TEST GRADE** for the entire packet! This will be your first test grade of the year, so let's start off on the right foot! **You are not allowed to use a calculator and you MUST show work.** Please complete it and bring it to class on the first day of school. Don't forget to enjoy your summer, as well! Thank you!

Addition
 Find the sum of the two numbers in each problem.
 Show all work.

Example:

$$\begin{array}{r}
 11 \\
 448 \\
 + 188 \\
 \hline
 636
 \end{array}$$

1.
$$\begin{array}{r}
 652 \\
 + 345 \\
 \hline
 \end{array}$$

2.
$$\begin{array}{r}
 203 \\
 + 525 \\
 \hline
 \end{array}$$

3.
$$\begin{array}{r}
 726 \\
 + 268 \\
 \hline
 \end{array}$$

Decimal Addition:

Remember to line up the decimals before adding. Bring the decimal straight down in your answer.

4.
$$\begin{array}{r}
 7.75 \\
 + 1.46 \\
 \hline
 \end{array}$$

5. $51.4 + 2.86$

6. $.1274 + 8.25$

Subtraction
 Find the difference between the two numbers in each problem. Show all work.

Example:

$$\begin{array}{r}
 313 \\
 7\cancel{4}\cancel{3} \\
 218 \\
 - \quad \quad \quad \\
 \hline
 525
 \end{array}$$

7.
$$\begin{array}{r}
 407 \\
 - 198 \\
 \hline
 \end{array}$$

8.
$$\begin{array}{r}
 7,007 \\
 - 2,426 \\
 \hline
 \end{array}$$

9.
$$\begin{array}{r}
 3,414 \\
 - 1,218 \\
 \hline
 \end{array}$$

Decimal Subtraction:

Remember to line up the decimals before subtracting. Bring the decimal straight down in your answer.

10.
$$\begin{array}{r}
 338.38 \\
 - 149.27 \\
 \hline
 \end{array}$$

11. $80.401 - 44.23$

12. $75.89 - 9.4$

Multiplication

Find the product of the two numbers in each problem. Show all work.

Example:

$$\begin{array}{r} 54 \\ \times 16 \\ \hline 324 \\ + 540 \\ \hline 864 \end{array}$$

13.

$$\begin{array}{r} 65 \\ \times 4 \\ \hline \end{array}$$

14.

$$\begin{array}{r} 42 \\ \times 8 \\ \hline \end{array}$$

15.

$$\begin{array}{r} 84 \\ \times 39 \\ \hline \end{array}$$

Decimal Multiplication:

Multiply as you would with whole numbers. Count the decimal places in each factor. The product (answer) has the same number of decimal places.

16.

$$\begin{array}{r} .13 \\ \times 70 \\ \hline \end{array}$$

17.

$$\begin{array}{r} 5.1 \\ \times 2 \\ \hline \end{array}$$

18.

$$\begin{array}{r} .108 \\ \times 2.5 \\ \hline \end{array}$$

Division

Find the quotient in each problem. If there is a remainder, state the remainders as R=____. Show all work. Feel free to use a separate sheet of paper.

19.

$$7 \overline{)591}$$

20.

$$12 \overline{)264}$$

21.

$$43 \overline{)2815}$$

Decimal Division:

If the divisor (outside number) is a decimal, you must move the decimal point (using multiplication) to the right until it becomes a whole number. Then, move the decimal in the dividend (inside number) the same number of times. Divide to find your answer (quotient).

Then, move the decimal straight up from the dividend to the quotient.

Remember, no remainders.

$$\begin{array}{r} \text{quotient} \\ \text{divisor} \overline{) \text{dividend}} \end{array}$$

22.

23.

24.

$$3 \overline{) 31.8}$$

$$.5 \overline{) 7.45}$$

$$.12 \overline{) 12.24}$$

Rounding

Underline the given place value. Look to the right. If this digit is 5 or greater, increase the underlined digit by 1. If the digit to the right is less than 5, keep the underlined digit the same.

Round to the nearest...

hundredth

0.547 0.55

Round to the nearest....

25. tenth
0.3479

26. hundredth
0.7553

27. whole number
3.268

28. ten
162.21

29. thousandth
0.0036

30. hundred
990.54

Compare the decimals.

Compare using <, >, or =

1.2 1.20 1.2 = 1.20

31. 0.205 0.21

32. 1.03 0.03

33. 0.04 0.050

34. 0.1 0.1000

35. 0.52 0.500

36. 0.41 0.405

Show your work!

Name _____

Complete each of the problems below. Please show all of your work.

37) Reduce each of the following fractions:

a) $\frac{39}{42} = \frac{\quad}{\quad}$

b) $\frac{10}{18} = \frac{\quad}{\quad}$

c) $\frac{12}{40} = \frac{\quad}{\quad}$

d) $\frac{14}{56} = \frac{\quad}{\quad}$

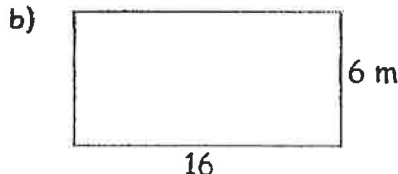
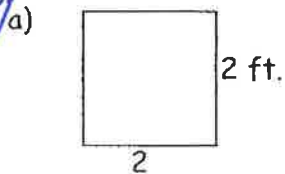
e) $\frac{16}{24} = \frac{\quad}{\quad}$

f) $\frac{18}{54} = \frac{\quad}{\quad}$

g) $\frac{20}{75} = \frac{\quad}{\quad}$

h) $\frac{21}{28} = \frac{\quad}{\quad}$

38) Find the perimeter and area of the figures:



P =

P =

A =

A =

39) Find the greatest common factor (GCF) of the following sets of numbers:

a) 12, 16

b) 18, 20

c) 35, 42

d) 50, 60

40) If $M = 27$, simplify each of the following:

a) $M + 9$

b) $M - 12$

c) $32 - M$

d) $2M$

41) Change the following fractions to mixed numbers:

a) $\frac{7}{2} = \frac{\quad}{\quad}$

b) $\frac{8}{3} = \frac{\quad}{\quad}$

c) $\frac{9}{4} = \frac{\quad}{\quad}$

d) $\frac{10}{6} = \frac{\quad}{\quad}$

e) $\frac{11}{7} = \frac{\quad}{\quad}$

f) $\frac{12}{8} = \frac{\quad}{\quad}$

g) $\frac{13}{9} = \frac{\quad}{\quad}$

h) $\frac{14}{10} = \frac{\quad}{\quad}$

42. Use division algorithm. Show your work.

a. $14.74 \div 2.2 =$

b. $11.56 \div 0.34 =$

43. Chris is buying a microscope for \$228.72. She is paying in 12 weekly installments. How much will Chris pay each week?

44. Joey bought a 72 ounce box of dog biscuits. How many pounds did he buy?

45. Tom starts with \$12 and saves \$20 each week. Ruth starts with \$15 and saves \$20 each week. Complete the chart to show how much money each has saved at the end of each week.

	Tom's savings	Ruth's savings
Start	\$12	\$15
Week 1		
Week 2		
Week 3		

46. Find the mean, median, mode, and range of the following set of numbers: 5, 5, 7, 5, 9, 11, 18

Mean _____ Median _____ Mode _____ Range _____

47. Draw a number line and plot the following fractions: $\frac{3}{10}$, $\frac{4}{9}$, $\frac{5}{8}$, $\frac{1}{2}$, $\frac{4}{5}$

48. Find the number that corresponds with each of the following prime factorizations:

a. $2^2 \times 3^3 =$

b. $5^2 \times 7 =$

c. $3^2 \times 5 \times 11 =$

49. Simplify the following using order of operations (PEMDAS).

a. $3 + 2 \times 8 \div 4$

c. $(10 + 2 - 2) \times 6^2 - 1$

b. $48 \div (10 - 4) + 2^2$

d. $40 \div 4 - (5 - 3)$

50. Use logical reasoning to solve the problems. Show your work.

a. On her 16th birthday, Janet's savings account had a balance of \$620. If she adds \$15 each month to her account, what will her account balance be on her 18th birthday?

b. Mario is $\frac{1}{2}$ the age of Fred. Fred is 8 years younger than Jake. Jake is twice as old as Peter. Peter is 9 years old. How old is Mario?

c. Robert practices the piano for 45 minutes each day. In simplest form, what fraction of an hour does Robert practice each day?

d. One fourth of the students in 6th grade class walk to school. What PERCENT of the class DOES NOT walk to school?