

Summer Math Packet

Entering 7th Grade

Name: _____

Solve:

1. $7^3 =$ _____ 2. $9^5 =$ _____ 3. $1^7 =$ _____ 4. $6^1 =$ _____

Solve:

1. $6 + 9 \times 3 =$ _____ 2. $18 \div 6 + 7 \times 7 =$ _____ 3. $5^3 - 8^2 + 14 =$ _____

Write the GCF (greatest common factor) for each pair of numbers.

1. 32, 48 _____ 2. 5, 7 _____ 3. 27, 36 _____ 4. 60, 90 _____

Write the LCM (least common multiple) for each pair of numbers.

1. 4, 6 _____ 2. 9, 12 _____ 3. 4, 7 _____ 4. 3, 6 _____

Write the place value in words for the underlined digit in each number. (Be sure to use *th* if the number represents a decimal)

1. 367.9 _____ 2. 29.837 _____
3. 123,465 _____ 4. 4.326 _____
5. 56,729.4 _____ 6. 213.368 _____

Compare the following decimal numbers using $<$, $>$, or $=$

1.	6.846	_____	6.6	2.	1.22	_____	1.226
3.	4.61	_____	4.398	4.	5.448	_____	5.447
5.	2.1	_____	2.10	6.	9.7	_____	9.3

Classify each number as prime or composite.

1. 25 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	2. 18 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	3. 2 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	4. 27 <input type="checkbox"/> Prime <input type="checkbox"/> Composite
5. 30 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	6. 77 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	7. 9 <input type="checkbox"/> Prime <input type="checkbox"/> Composite	8. 41 <input type="checkbox"/> Prime <input type="checkbox"/> Composite

Find the prime factorization of each number. (you will need to make a factor tree)

1. 24	2. 17	3. 200	4. 66
5. 48	6. 37	7. 18	8. 56

Write yes if the number is divisible by the given number. Write no if it is not divisible by the given number.

1. 864 by 2 _____ by 3 _____ by 4 _____ by 5 _____	2. 24 by 2 _____ by 3 _____ by 4 _____ by 5 _____	3. 92,123 by 2 _____ by 3 _____ by 4 _____ by 5 _____	4. 70,644 by 2 _____ by 3 _____ by 4 _____ by 5 _____
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Multiply

1.
$$\begin{array}{r} 367 \\ \times 59 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 8.43 \\ \times 2.6 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 6.797 \\ \times .8 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 8642 \\ \times 24 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 23.7 \\ \times .4 \\ \hline \end{array}$$

Add or Subtract

1. $16.55 + 84.6$	2. $79.602 - 72.18$
3. $9.2 - 5.119$	4. $52.102 + 17.8$

Add or Subtract. Be sure your answer is in simplest form

1. $7\frac{3}{15} + \frac{3}{10} =$	2. $7\frac{1}{9} - \frac{1}{6} =$	3. $4\frac{3}{17} + \frac{3}{5} =$	4. $11\frac{5}{12} - \frac{5}{7} =$
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Add or Subtract. Be sure your answer is in simplest form.

1. $\begin{array}{r} 6\frac{13}{16} \\ + 6\frac{2}{3} \\ \hline \end{array}$	2. $\begin{array}{r} 15\frac{3}{5} \\ - 1\frac{5}{3} \\ \hline \end{array}$	3. $\begin{array}{r} 1\frac{6}{9} \\ + 4\frac{4}{7} \\ \hline \end{array}$	4. $\begin{array}{r} 22\frac{4}{5} \\ - 10\frac{1}{2} \\ \hline \end{array}$	5. $\begin{array}{r} 7\frac{1}{9} \\ - 4\frac{2}{3} \\ \hline \end{array}$
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Multiply. Make sure your answer is in simplest form.

1. $3\frac{6}{6} \times \frac{6}{7} =$	2. $1\frac{9}{18} \times \frac{9}{11} =$	3. $4\frac{4}{9} \times 8 =$	4. $1\frac{8}{2} \times \frac{8}{11} =$
5. $9\frac{4}{9} \times \frac{4}{7} =$	6. $14\frac{5}{15} \times \frac{5}{9} =$	7. $7\frac{10}{11} \times \frac{10}{11} =$	8. $17\frac{17}{24} \times 4 =$

Multiply. Make sure your answer is in simplest form.

1. $3\frac{7}{5} \times \frac{7}{12} =$	2. $1\frac{3}{6} \times 3\frac{3}{7} =$	3. $2\frac{7}{9} \times 3\frac{7}{11} =$	4. $1\frac{1}{4} \times 9 =$
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Divide. Write your answer in simplest form. (Remember to find the reciprocal of the divisor, look for shortcuts, and then multiply)

1. $7\frac{7}{8} \div \frac{7}{10} =$	2. $3\frac{3}{5} \div 3 =$	3. $11\frac{1}{14} \div \frac{1}{4} =$	4. $7\frac{5}{12} \div \frac{5}{16} =$
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Divide. Make sure your answer is in simplest form. (Remember to change to improper fractions first, find the reciprocal of the divisor, look for shortcuts, and then multiply)

1. $6 \div 7\frac{2}{11} =$	2. $2\frac{7}{12} \div 1\frac{5}{6} =$	3. $3\frac{4}{7} \div 1\frac{3}{8} =$	4. $1\frac{1}{10} \div 2\frac{6}{10} =$
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Find the percent of each number. (use the percent as reduced fraction and solve in your head)

1. 65% of 70	2. 30% of 140	3. 70% of 30
4. 50% of 40	5. 5% of 160	6. 30% of 10

Find the percent of each number. (Multiply the whole number by the percent as a decimal number, do not round your answer)

1. 38% of 89	2. 77% of 29	3. 79% of 18
4. 73% of 17	5. 29% of 62	6. 43% of 91

Write each as a decimal.

1. 917 thousandths	2. $\frac{9}{100}$	3. $\frac{337}{10000}$	4. seven tenths
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Round each decimal number to the nearest tenth.

1. .78 _____ 2. .349 _____ 3. 7.65 _____
 4. 8.597 _____

Round each decimal number to the nearest hundredth.

1. 3.896 _____ 2. 24.009 _____ 3. .6592 _____
 4. 3.904 _____

Calculate the percent increase or decrease for the following pairs of numbers.

$$\frac{\text{difference between \#s}}{\text{original \#}} \times 100$$

- 36 \longrightarrow 108 _____ 49 \longrightarrow 14 _____
 8 \longrightarrow 28 _____ 29 \longrightarrow 11 _____

Solve:

1. Marty has 11 more comic books than Joe and Ben has $\frac{1}{3}$ as many as Joe. Joe has 51 comic books. How many comic books do the boys have all together? _____

2. Sharon is behind Jean in line. Mary is in front of Jack who is in front of Jean. Sam is last in line. Write the order of the line.

3. If 6 times a number is 78 then $\frac{1}{2}$ of that number is _____.

4. If $\frac{5}{7}$ of the 91 balloons are red and the rest are blue, how many blue balloons are there?

5. $\frac{7}{12}$ of the 48 kids in choir are in 8th grade and $\frac{1}{4}$ of the kids in choir are in 7th grade. The rest of the kids are in 6th grade. How many sixth graders are in the choir? _____

6. Marty bought a shirt for \$17.99; tax was 9%. How much tax did Marty pay? _____

7. Jim made 18 of 21 free throws. What percent of the free throws did he make? _____

8. A \$75.00 coat is on sale for 33% off. How much will the coat cost? _____

9. Mary buys a new tennis racket that costs \$84.99 and tax is 7%. What is Mary's total bill with tax? _____

10. Jerry works 40 hours a week and makes \$21.00 an hour. He pays 25% of his money to the government in taxes. How much money does Jerry take home each week? _____

11. $\frac{1}{2}$ of 1% of the 200,000 college athletes will play pro ball. How many athletes have a chance to play pro ball? _____