

## Rising Sixth Grade Math

6-1  
6-2

Dear Parents and Students,

Contained in this packet is the Summer Math Preparation for 6<sup>th</sup> Grade. The purpose of this packet is to keep concepts current throughout the summer. It references a variety of computational and problem-solving skills.

THIS PACKET IS DUE THE FIRST DAY OF SCHOOL, and if submitted fully complete, the student earns 100% as a quiz grade. This is a beneficial way to begin the first trimester! (Should a packet not be completed in full or not submitted on time, it will receive a grade proportional to the amount completed). The packet will then be graded during the first week of school, and this score will account for a second quiz grade. There are multiple benefits to completing the packet thoroughly during the summer months!

### Instructions for completing the Summer Math Packet:

- Show all calculations and/or work with each problem. Calculations should be completed on a separate page if there is not enough room to show ALL of the steps needed to determine a solution. All answers should be boxed or circled.
- Place a header on any separate sheets used for calculations. Each separate calculation should be labeled with the number of the page from which the problem came, as well as the problem number.
- Do not rely on using a calculator to complete this packet. Most of the packet is not able to be done using a calculator. If you would like, you may check your work AFTER COMPLETING THE PROBLEM YOURSELF. Since all problems require you to show your thinking, it is to your advantage to use the best calculator available – the one in your head!

Wishing you a great summer!

Mathematically yours,

Mr. Duke

Find the sum.

$$\begin{array}{r} 1. \quad 6,428 \\ \quad 6,093 \\ \quad \quad 502 \\ + \quad 722 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6,477 \\ \quad \quad 75 \\ \quad \quad 816 \\ + \quad 41 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 3. \quad 186,820 \\ \quad \quad 509 \\ \quad \quad 407 \\ + \quad 88 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 4. \quad 174,687 \\ \quad 57,676 \\ \quad \quad 554 \\ + 517,211 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 5. \quad \quad 16 \\ \quad 76,340 \\ \quad 12,730 \\ + 6,095 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 6. \quad 59,757 \\ \quad \quad 60 \\ \quad \quad 816 \\ + \quad 26 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 7. \quad \quad 65 \\ \quad \quad 588 \\ \quad 84,033 \\ + 236,858 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 8. \quad \quad 6,154 \\ \quad \quad 28,484 \\ \quad 709,110 \\ + \quad 1,459 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 9. \quad 59,406 \\ \quad 36,626 \\ \quad \quad 40 \\ + 85,539 \\ \hline \hline \end{array}$$

Find the difference.

$$\begin{array}{r} 1. \quad 261,301 \\ - \quad 66,787 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 74,663,808 \\ - \quad 873,235 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 246,035 \\ - \quad 244,519 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 476,522 \\ - \quad 96,342 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 18,144,433 \\ - \quad 7,360,743 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 973,294 \\ - \quad 29,273 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 16,050,684 \\ - \quad 36,314 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 96,740,944 \\ - \quad 85,175,731 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 984,672 \\ - \quad 72,754 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 22,435,988 \\ - \quad 556,611 \\ \hline \\ \hline \end{array}$$

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Example:  $1,836.21 = 1,000 + 800 + 30 + 6 + 0.2 + 0.01$

Write the 6-digit numbers

1. \_\_\_\_\_  $10,000 + 4,000 + 20 + 3 + 0.4$

2. \_\_\_\_\_  $90,000 + 4,000 + 100 + 90 + 1 + 0.4$

3. \_\_\_\_\_  $70,000 + 4,000 + 400 + 90 + 5 + 0.7$

4. \_\_\_\_\_  $600,000 + 70,000 + 1,000 + 100 + 50 + 2$

5. \_\_\_\_\_  $90,000 + 6,000 + 500 + 50 + 4 + 0.9$

6. \_\_\_\_\_  $500,000 + 90,000 + 8,000 + 800 + 7$

7. \_\_\_\_\_  $9,000 + 700 + 20 + 9 + 0.4 + 0.07$

8. \_\_\_\_\_  $4,000 + 800 + 60 + 2 + 0.8 + 0.01$

9. \_\_\_\_\_  $800 + 20 + 8 + 0.6 + 0.07 + 0.004$

10. \_\_\_\_\_  $400,000 + 70,000 + 5,000 + 900 + 60 + 8$

## Adding and Subtracting Fractions Word Problems

1. You give  $\frac{1}{3}$  of a pan of brownies to Susan and  $\frac{1}{6}$  of the pan of brownies to Patrick. How much of the pan of brownies did you give away?
2. You go out for a long walk. You walk  $\frac{3}{4}$  of a mile and then sit down to take a rest. Then you walk another  $\frac{3}{8}$  of a mile. How far did you walk?
3. Pam walked  $\frac{7}{8}$  of a mile to school. Paul walked  $\frac{1}{2}$  of a mile to school. How much farther did Pam walk than Paul?
4. A school wants to make a new playground by cleaning up an abandoned lot that is shaped like a rectangle. The job of planning the playground was given to a group of students. The students decide to use  $\frac{1}{4}$  of the playground for a basketball court and  $\frac{3}{8}$  of the playground for a soccer field. How much is left for swings and play equipment?
5. Marnie made two types of cookies. She used  $\frac{2}{3}$  of a cup of sugar for one recipe and  $\frac{1}{4}$  of a cup for the other type. How much sugar did she use in all?

Find the product.

$$\begin{array}{r} 1. \quad 624 \\ \times \quad 43 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 353 \\ \times \quad 83 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 106 \\ \times \quad 50 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 283 \\ \times \quad 33 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 606 \\ \times \quad 36 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 305 \\ \times \quad 55 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 192 \\ \times \quad 89 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 878 \\ \times \quad 87 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 659 \\ \times \quad 81 \\ \hline \\ \hline \end{array}$$

Find the quotient with remainder.

1.

$$23 \overline{) 77,893}$$

2.

$$11 \overline{) 34,785}$$

3.

$$13 \overline{) 70,656}$$

4.

$$22 \overline{) 55,678}$$

5.

$$13 \overline{) 71,698}$$

6.

$$22 \overline{) 80,364}$$

Convert.

1.  $\frac{135}{50} =$  \_\_\_\_\_

2.  $\frac{19}{3} =$  \_\_\_\_\_

3.  $\frac{26}{15} =$  \_\_\_\_\_

4.  $\frac{863}{100} =$  \_\_\_\_\_

5.  $\frac{246}{25} =$  \_\_\_\_\_

6.  $\frac{24}{5} =$  \_\_\_\_\_

7.  $\frac{326}{50} =$  \_\_\_\_\_

8.  $\frac{23}{10} =$  \_\_\_\_\_

9.  $\frac{19}{2} =$  \_\_\_\_\_

10.  $\frac{5}{3} =$  \_\_\_\_\_

11.  $\frac{58}{5} =$  \_\_\_\_\_

12.  $\frac{625}{50} =$  \_\_\_\_\_

13.  $\frac{135}{25} =$  \_\_\_\_\_

14.  $\frac{179}{16} =$  \_\_\_\_\_

15.  $\frac{7}{2} =$  \_\_\_\_\_

16.  $\frac{11}{8} =$  \_\_\_\_\_

17.  $\frac{35}{4} =$  \_\_\_\_\_

18.  $\frac{124}{20} =$  \_\_\_\_\_

19.  $\frac{151}{15} =$  \_\_\_\_\_

20.  $\frac{315}{25} =$  \_\_\_\_\_

21.  $\frac{22}{5} =$  \_\_\_\_\_



Find the difference.

1.  $19\frac{5}{8} - 19\frac{2}{8} =$  \_\_\_\_\_

2.  $14\frac{1}{2} - 8\frac{2}{10} =$  \_\_\_\_\_

3.  $20\frac{4}{6} - 3\frac{5}{6} =$  \_\_\_\_\_

4.  $19\frac{3}{5} - 18\frac{4}{5} =$  \_\_\_\_\_

5.  $19\frac{1}{4} - 15\frac{2}{3} =$  \_\_\_\_\_

6.  $20\frac{1}{8} - 2\frac{1}{2} =$  \_\_\_\_\_

7.  $17\frac{7}{9} - 10\frac{7}{8} =$  \_\_\_\_\_

8.  $18\frac{1}{10} - 8\frac{2}{5} =$  \_\_\_\_\_

9.  $15\frac{1}{6} - 4\frac{1}{2} =$  \_\_\_\_\_

10.  $14\frac{3}{4} - 10\frac{1}{3} =$  \_\_\_\_\_

11.  $19\frac{6}{8} - 16\frac{3}{5} =$  \_\_\_\_\_

12.  $18\frac{4}{8} - 3\frac{5}{8} =$  \_\_\_\_\_

Find the product.

1.  $1 \frac{9}{10} \times 3 \frac{1}{2} =$  \_\_\_\_\_

2.  $3 \frac{1}{3} \times 1 \frac{1}{12} =$  \_\_\_\_\_

3.  $1 \frac{3}{6} \times 3 \frac{3}{4} =$  \_\_\_\_\_

4.  $2 \frac{3}{10} \times 1 \frac{2}{6} =$  \_\_\_\_\_

5.  $1 \frac{1}{2} \times 3 \frac{1}{2} =$  \_\_\_\_\_

6.  $1 \frac{2}{8} \times 3 \frac{2}{4} =$  \_\_\_\_\_

7.  $2 \frac{3}{6} \times 2 \frac{1}{3} =$  \_\_\_\_\_

8.  $1 \frac{1}{3} \times 2 \frac{3}{8} =$  \_\_\_\_\_

9.  $1 \frac{1}{2} \times 3 \frac{2}{3} =$  \_\_\_\_\_

10.  $3 \frac{5}{8} \times 3 \frac{3}{12} =$  \_\_\_\_\_

11.  $1 \frac{1}{4} \times 2 \frac{5}{8} =$  \_\_\_\_\_

12.  $3 \frac{8}{10} \times 3 \frac{4}{9} =$  \_\_\_\_\_

13.  $1 \frac{1}{2} \times 1 \frac{1}{6} =$  \_\_\_\_\_

14.  $2 \frac{2}{6} \times 1 \frac{6}{12} =$  \_\_\_\_\_

Find the quotient.

1.  $6 \frac{8}{10} \div \frac{2}{5} =$  \_\_\_\_\_

2.  $6 \frac{3}{6} \div \frac{3}{5} =$  \_\_\_\_\_

3.  $4 \frac{3}{12} \div \frac{1}{4} =$  \_\_\_\_\_

4.  $9 \frac{6}{8} \div \frac{1}{5} =$  \_\_\_\_\_

5.  $3 \frac{3}{6} \div \frac{4}{6} =$  \_\_\_\_\_

6.  $3 \frac{7}{10} \div \frac{6}{8} =$  \_\_\_\_\_

7.  $7 \frac{1}{2} \div \frac{4}{5} =$  \_\_\_\_\_

8.  $3 \frac{1}{4} \div \frac{6}{8} =$  \_\_\_\_\_

9.  $2 \frac{5}{8} \div \frac{1}{6} =$  \_\_\_\_\_

10.  $5 \frac{3}{10} \div \frac{2}{5} =$  \_\_\_\_\_



Find the quotient.

1.  $6 \overline{)0.03}$

2.  $9 \overline{)6.831}$

3.  $7 \overline{)2.604}$

4.  $4 \overline{)9.36}$

5.  $4 \overline{)892.9}$

6.  $7 \overline{)4.256}$

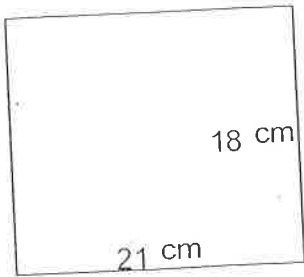
7.  $3 \overline{)0.036}$

8.  $3 \overline{)0.81}$

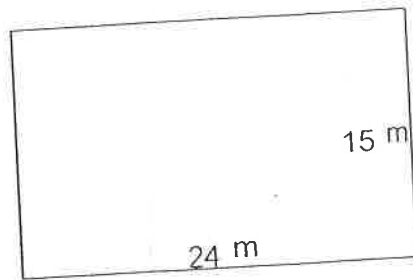
9.  $7 \overline{)50.421}$

Find the perimeter and area of each rectangle.

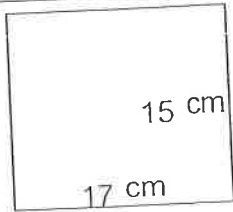
1.



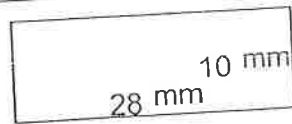
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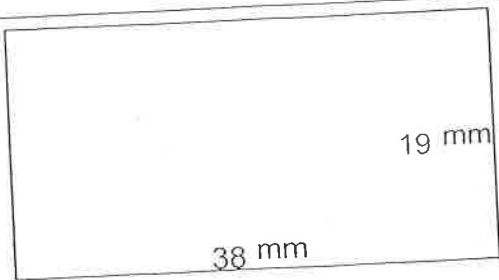
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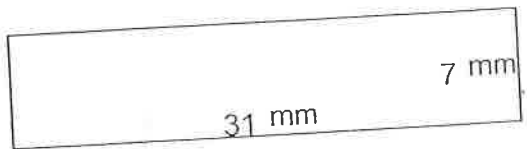
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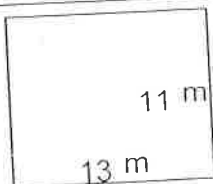
5.



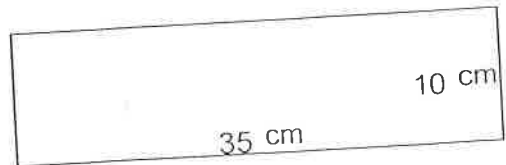
6.



7.



8.



## Multiplying Decimals Word Problems #1

1. Johnny makes \$4.75 per hour at his work. If he works 6 hours, how much money will he earn?
2. Tina's cat weighs 2.6 kilograms. Her dog weighs 4 times as much as her cat. How much does her dog weigh in kilograms?
3. Baby Isabel plays with blocks. Each block is 3.7 inches tall. She has a collection of 41 blocks. If she could stack all of the blocks up one on top of the other, how many inches tall would her tower of blocks be?
4. Carrie likes to buy t-shirts at the local clothing store. They cost \$9.95 each. One day, she bought 25 t-shirts. How much money did she spend?
5. Jim rides the bus to and from school each day. A one-way trip is 8.12 kilometers. How many kilometers does he travel in 3 days?

### Mixed Practice

1. Suppose you want to buy three loaves of bread that cost \$1.50 each and a jar of peanut butter that costs \$4. A jar of jelly is \$2.75, but you don't need any jelly. You have \$10. How much money will you have left over?
  
2. The star running back on our football team got most of his total yardage running. The rest was catching passes. He caught passes for 60 yards. His total yardage was 150 yards. The running back for the other team got 200 yards. How many yards did the star running back on our football team get running?
  
3. The average temperature in Lincoln in July is 85 degrees. Last Wednesday, it was 90 degrees. Today it was 15 degrees cooler than last Wednesday. What was the temperature today?
  
4. Julie's yard is rectangular. One side of the yard is 100 feet wide. The total area of the yard is 3,000 square feet. What is the length of the other side of the yard?
  
5. Joanna has 3 more books in her backpack than Sophie. If Sophie has  $n$  books, how many does Joanna have?

6. Martin has a business washing cars. Last year he washed 20 cars a week. This year, he wants to increase his business to 1,200 cars a year. How many cars will he have to wash each month on average?
  
7. Michelle has \$80 to buy a new outfit. She found a skirt for \$20, a blouse for \$25, and a belt for \$8. How much does she have left to buy shoes?
  
8. In track last week, the boys ran sixteen laps. The girls ran four more laps. Each lap is a quarter of a mile. How many miles did the girls run?