

**FOR ALL STUDENTS TAKING 6TH GRADE MATH
2021-2022**

SUMMER REVIEW PACKET

NAME _____

To all Orangeburg Prep Math Students:

In an effort to continue to improve our standardize test scores and prevent knowledge loss over the summer break, you are asked to complete the attached worksheets and be prepared to turn them in on the first day of classes. The questions in the packet focus on the skills you were taught in your previous math courses. Some problems may be a bit involved, so it is not a good idea to wait until the last minute.

Work needs to accompany each problem and all answers should be in simplified form. The PRINTED packet is due at the beginning of class on Aug. 19 and will be counted as a project grade. A score of 80% will be given if every problem is attempted. Additional points, up to 20%, will be given for accuracy.

You will also be given a quiz on this packet during the first week of school, so make sure to bring questions that you have during Open House on Aug. 17. Any assignment not turned in on time will receive a 10 point deduction for each day that it is late.

Enjoy your summer vacation and your math packet. We look forward to a great school year starting in August.

The Math Department

HONOR CODE: I promise that I completed this summer review packet independently from any other student. I used only the resources given in this packet. **I did NOT use Photomath or any similar program!**

PARENT: _____

STUDENT: _____

Helpful Websites

www.regentsprep.org

www.khanacademy.org

www.purplemath.com/modules

www.Aleks.com (a website where you can subscribe for individual math lessons)

SKILL 3

Name _____ Date _____ Period _____

Adding Whole Numbers

To add whole numbers, first add the ones. Then add the digits in each place from right to left.

Examples

$\begin{array}{r} 1 \quad 7056 \\ + 973 \\ \hline 9 \end{array}$ <p><i>Add the ones.</i></p>	$\begin{array}{r} 7056 \\ + 973 \\ \hline 29 \end{array}$ <p><i>Add the tens.</i></p>	$\begin{array}{r} 7056 \\ + 973 \\ \hline 029 \end{array}$ <p><i>Add the hundreds.</i></p>	$\begin{array}{r} 7056 \\ + 973 \\ \hline 8029 \end{array}$ <p><i>Add the thousands.</i></p>
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2 \$406 + \$881 + \$75

$\begin{array}{r} 406 \\ 881 \\ + 75 \\ \hline 1362 \end{array}$	<i>Write in columns.</i>
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Add.

1.
$$\begin{array}{r} 72 \\ + 65 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 62 \\ + 83 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 39 \\ + 37 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 66 \\ + 85 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 768 \\ + 67 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 495 \\ + 48 \\ \hline \end{array}$$

7.
$$\begin{array}{r} \$470 \\ + 583 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 237 \\ + 579 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 1570 \\ + 2823 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 5126 \\ + 2899 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 3973 \\ + 1689 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 1482 \\ + 3497 \\ \hline \end{array}$$

SKILL 4

Name _____ Date _____ Period _____

Subtracting Whole Numbers

To subtract whole numbers, first subtract the ones. Then subtract the digits in each place from right to left. Rename as needed.

Examples

1

$\begin{array}{r} 896 \\ - 145 \\ \hline 1 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 896 \\ - 145 \\ \hline 51 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 896 \\ - 145 \\ \hline 751 \end{array}$
<i>Subtract the ones.</i>		<i>Subtract the tens.</i>		<i>Subtract the hundreds.</i>

2

$\begin{array}{r} 381 \\ - 285 \\ \hline \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} \overset{7}{\cancel{8}}\overset{11}{1} \\ - 285 \\ \hline 6 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} \overset{2}{\cancel{3}}\overset{11}{\cancel{8}}\overset{11}{1} \\ - 285 \\ \hline 96 \end{array}$
<i>Since 1 < 5, rename 8 tens as 7 tens and 10 ones. Then, 10 ones + 1 one = 11 ones.</i>				

3

$\begin{array}{r} 506 \\ - 238 \\ \hline \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} \overset{49}{\cancel{5}}\overset{16}{6} \\ - 238 \\ \hline 8 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} \overset{49}{\cancel{5}}\overset{16}{6} \\ - 238 \\ \hline 268 \end{array}$
<i>Since 6 < 8, rename 50 tens as 49 tens 10 ones. Then, 10 ones + 6 ones = 16 ones.</i>				

Subtract.

1. $\begin{array}{r} 87 \\ - 53 \\ \hline \end{array}$	2. $\begin{array}{r} 56 \\ - 40 \\ \hline \end{array}$	3. $\begin{array}{r} 854 \\ - 630 \\ \hline \end{array}$	4. $\begin{array}{r} 695 \\ - 132 \\ \hline \end{array}$
5. $\begin{array}{r} 34 \\ - 8 \\ \hline \end{array}$	6. $\begin{array}{r} 70 \\ - 28 \\ \hline \end{array}$	7. $\begin{array}{r} \$78 \\ - 59 \\ \hline \end{array}$	8. $\begin{array}{r} 480 \\ - 63 \\ \hline \end{array}$

Multiplying Whole Numbers

To multiply by a one-digit whole number, first multiply the ones. Then multiply the digits in each place from right to left.

Example

1 $\begin{array}{r} 835 \\ \times 6 \\ \hline 0 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 835 \\ \times 6 \\ \hline 10 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 835 \\ \times 6 \\ \hline 5010 \end{array}$
<i>Multiply the ones.</i>		<i>Multiply the tens.</i> <i>Add 3.</i>		<i>Multiply the hundreds.</i> <i>Add 2.</i>

To multiply by a two digit whole number, first multiply by the ones. Then multiply by the tens.

Examples

2 $\begin{array}{r} 2609 \\ \times 78 \\ \hline \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 2609 \\ \times 78 \\ \hline 20872 \end{array}$	\longrightarrow \longrightarrow \longrightarrow	$\begin{array}{r} 2609 \\ \times 78 \\ \hline 20872 \\ 182630 \\ \hline 203,502 \end{array}$
3 $\begin{array}{r} 1047 \\ \times 60 \\ \hline \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 1407 \\ \times 60 \\ \hline 0 \end{array}$	\longrightarrow \longrightarrow	$\begin{array}{r} 1407 \\ \times 60 \\ \hline 62,820 \end{array}$
		<i>Any number multiplied by zero is zero.</i>		

Multiply.

1. $\begin{array}{r} 700 \\ \times 25 \\ \hline \end{array}$	2. $\begin{array}{r} 602 \\ \times 4 \\ \hline \end{array}$	3. $\begin{array}{r} 218 \\ \times 63 \\ \hline \end{array}$	4. $\begin{array}{r} \$189 \\ \times 42 \\ \hline \end{array}$
5. $\begin{array}{r} \$125 \\ \times 11 \\ \hline \end{array}$	6. $\begin{array}{r} 264 \\ \times 40 \\ \hline \end{array}$	7. $\begin{array}{r} 3265 \\ \times 72 \\ \hline \end{array}$	8. $\begin{array}{r} 6019 \\ \times 94 \\ \hline \end{array}$

SKILL 6

Name _____ Date _____ Period _____

Dividing Whole Numbers

To divide whole numbers, start with the digit in the left most position.
Then divide the digit in each place from left to right.

Examples

$$\begin{array}{r}
 1 \\
 4 \overline{)508} \\
 \underline{-4} \downarrow \\
 10
 \end{array}
 \longrightarrow
 \begin{array}{r}
 12 \\
 4 \overline{)508} \\
 \underline{-4} \downarrow \\
 10 \downarrow \\
 \underline{-8} \downarrow \\
 28
 \end{array}
 \longrightarrow
 \begin{array}{r}
 127 \\
 4 \overline{)508} \\
 \underline{-4} \downarrow \\
 10 \downarrow \\
 \underline{-8} \downarrow \\
 28 \\
 \underline{-28} \\
 0
 \end{array}$$

Start with
the hundreds.

Divide the tens.

Divide the ones.
The remainder is 0.

$$\begin{array}{r}
 9 \\
 26 \overline{)2365} \\
 \underline{-234} \\
 2
 \end{array}
 \longrightarrow
 \begin{array}{r}
 90 \\
 26 \overline{)2365} \\
 \underline{-234} \downarrow \\
 25 \\
 \underline{-0} \\
 25
 \end{array}
 \longrightarrow
 \begin{array}{r}
 90 \text{ R } 25 \\
 26 \overline{)2365} \\
 \underline{-234} \downarrow \\
 25 \\
 \underline{-0} \\
 25
 \end{array}$$

$$\begin{array}{r}
 3468 \div 17 \\
 2 \\
 17 \overline{)3468} \\
 \underline{-34} \\
 0
 \end{array}
 \longrightarrow
 \begin{array}{r}
 20 \\
 17 \overline{)3468} \\
 \underline{-34} \downarrow \\
 06
 \end{array}
 \longrightarrow
 \begin{array}{r}
 204 \\
 17 \overline{)3468} \\
 \underline{-34} \downarrow \\
 068 \\
 \underline{-68} \\
 0
 \end{array}$$

Since $6 < 17$, the
quotient has 0 tens.

Divide.

1. $5 \overline{)3255}$

2. $70 \overline{)359}$

3. $47 \overline{)517}$

4. $18 \overline{)901}$



Adding Decimals

To add decimals, first line up the decimal points. Then add as with whole numbers.

Examples 1 Add: $36.801 + 8.945$.

$$\begin{array}{r} 11 \\ 36.801 \\ + 8.945 \\ \hline 45.746 \end{array}$$

2 Add: $7.3 + 9 + 8.45$.

$$\begin{array}{r} 7.30 \\ 9.00 \\ + 8.45 \\ \hline 24.75 \end{array}$$

Write 9 as 9.00.

3 Add: $\$415 + \29.05 .

$$\begin{array}{r} 1 \\ \$415.00 \\ + 29.05 \\ \hline \$444.05 \end{array}$$

Annex zeros to \$415 to help align the decimal points.

Add.

1. $\begin{array}{r} \$27.06 \\ + 7.06 \\ \hline \end{array}$

2. $\begin{array}{r} 1.034 \\ + 0.08 \\ \hline \end{array}$

3. $\begin{array}{r} 68.7 \\ + 8.41 \\ \hline \end{array}$

4. $\begin{array}{r} 42.6 \\ + 21.919 \\ \hline \end{array}$

5. $\begin{array}{r} 93.7 \\ + 24.85 \\ \hline \end{array}$

6. $\begin{array}{r} 140.98 \\ + 16.5 \\ \hline \end{array}$

7. $\begin{array}{r} 15.987 \\ + 9.07 \\ \hline \end{array}$

8. $\begin{array}{r} 478.98 \\ + 99.076 \\ \hline \end{array}$

9. $\begin{array}{r} 14.16 \\ + 8.9 \\ \hline \end{array}$

10. $\begin{array}{r} 67.032 \\ + 5.98 \\ \hline \end{array}$

11. $\begin{array}{r} 246.38 \\ + 19.976 \\ \hline \end{array}$

12. $\begin{array}{r} 17.32 \\ + 8.963 \\ \hline \end{array}$

Subtracting Decimals

To subtract decimals, line up the decimal points.
Then subtract as with whole numbers.

Examples 1 Subtract: $8.1 - 4.75$.

$$\begin{array}{r} 0.10 \\ 8.10 \\ - 4.75 \\ \hline 3.35 \end{array}$$

Annex a zero to 8.1 to help align the decimal points.

2 Subtract: $\$84 - \1.79 .

$$\begin{array}{r} 39.10 \\ \$84.00 \\ - 1.79 \\ \hline \$82.21 \end{array}$$

Annex two zeros to \$84 to help align the decimal points.

3 Subtract: $16.703 - 8$.

$$\begin{array}{r} 16.703 \\ - 8.000 \\ \hline 8.703 \end{array}$$

Annex three zeros to 8 to help align the decimal points.

Subtract.

1. $\begin{array}{r} 9.14 \\ - 2.075 \\ \hline \end{array}$

2. $\begin{array}{r} 712.53 \\ - 6.44 \\ \hline \end{array}$

3. $\begin{array}{r} 20.14 \\ - 8.093 \\ \hline \end{array}$

4. $\begin{array}{r} \$12.65 \\ - 10.99 \\ \hline \end{array}$

5. $\begin{array}{r} 14.395 \\ - 2.654 \\ \hline \end{array}$

6. $\begin{array}{r} 2.42 \\ - 0.5 \\ \hline \end{array}$

7. $\begin{array}{r} 0.261 \\ - 0.09 \\ \hline \end{array}$

8. $\begin{array}{r} 9.407 \\ - 0.22 \\ \hline \end{array}$

9. $\begin{array}{r} 6.324 \\ - 0.75 \\ \hline \end{array}$

10. $\begin{array}{r} 42.903 \\ - 8.05 \\ \hline \end{array}$

11. $\begin{array}{r} 16.37 \\ - 5.609 \\ \hline \end{array}$

12. $\begin{array}{r} 18 \\ - 7.63 \\ \hline \end{array}$

Multiplying Decimals by Whole Numbers

To multiply a decimal by a whole number, first multiply as with whole numbers. Then place the decimal point in the product. The product has the same number of decimal places as the decimal factor.

Examples 1 Multiply: 421×0.6 .

$$\begin{array}{r} 421 \\ \times 0.6 \\ \hline 252.6 \end{array}$$

← 1 decimal place in the decimal factor
← 1 decimal place in the product

2 Multiply: $\$6.16 \times 47$.

$$\begin{array}{r} \$6.16 \\ \times 47 \\ \hline 4312 \\ 24640 \\ \hline \$289.52 \end{array}$$

← 2 decimal places in the decimal factor
← 2 decimal places in the product

Multiply.

1. $\begin{array}{r} 23 \\ \times 0.8 \\ \hline \end{array}$

2. $\begin{array}{r} 45 \\ \times 0.9 \\ \hline \end{array}$

3. $\begin{array}{r} 216 \\ \times 0.2 \\ \hline \end{array}$

4. $\begin{array}{r} \$0.83 \\ \times 7 \\ \hline \end{array}$

5. $\begin{array}{r} \$4.16 \\ \times 15 \\ \hline \end{array}$

6. $\begin{array}{r} 27 \\ \times 0.6 \\ \hline \end{array}$

7. $\begin{array}{r} 0.63 \\ \times 4 \\ \hline \end{array}$

8. $\begin{array}{r} \$5.65 \\ \times 14 \\ \hline \end{array}$

9. $\begin{array}{r} 231 \\ \times 0.41 \\ \hline \end{array}$

10. $\begin{array}{r} 0.62 \\ \times 11 \\ \hline \end{array}$

11. $\begin{array}{r} \$7.44 \\ \times 26 \\ \hline \end{array}$

12. $\begin{array}{r} 218 \\ \times 0.54 \\ \hline \end{array}$

SKILL
14

Name _____ Date _____ Period _____

Multiplying Decimals by Decimals

Multiply decimals just like you multiply whole numbers. The number of decimal places in the product is equal to the sum of the number of decimal places in the factors.

Example Multiply 0.038 and 0.17.

$$\begin{array}{r}
 0.038 \quad \leftarrow \text{three decimal places} \\
 \times 0.17 \quad \leftarrow \text{two decimal places} \\
 \hline
 266 \\
 38 \\
 \hline
 0.00646 \quad \leftarrow \text{five decimal places}
 \end{array}$$

The product is 0.00646.

Place the decimal point in each product.

1. $1.47 \times 6 = 882$

2. $0.9 \times 2.7 = 243$

3. $6.48 \times 2.4 = 15552$

Multiply.

4.
$$\begin{array}{r} 0.8 \\ \times 7 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 0.04 \\ \times 0.3 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 0.16 \\ \times 26 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 0.003 \\ \times 4.2 \\ \hline \end{array}$$

8. 12.2×0.06

9. 0.0015×0.15

10. 1.9×2.2

11. 3.59×0.02

12. 12.2×0.007

13. 0.7×3.11