Skills to work on over the summer:

Reading:

1. Read every day! Read a variety of books from a variety of genres.

2. Reading Plus - Log in and work hard! 😊

Math:

1. Work on math facts. Here are a few websites that practice multiplication/division
   https://www.arcademics.com/games/grand-prix
   https://www.arcademics.com/games/demolition
   https://www.arcademics.com/games/space-race
   https://www.multiplication.com/games/all-games

2. Work on the attached worksheets to be ready for 5th grade math.

Writing:

1. Keep a journal of fun happenings over the summer.

2. Write a story, letter, essay, or poem just for fun.
Another Example
Equivalent decimals name the same amount.

What are two other decimals equivalent to 1.4?
One and four tenths is the same as one and forty hundredths.
\[1.4 = 1.40\]
One and four tenths is the same as one and four hundred thousandths.
\[1.4 = 1.400\]
So, \[1.4 = 1.40 = 1.400\].

Guided Practice

Do You Understand?
1. MP.2 Reasoning The number 2.452 has two 2s. Why does each 2 have a different value?

Do You Know How?
For 2–3, write each number in standard form.
2. \[5 + 0.5 + 0.03 + 0.006\]
3. two and sixty-nine thousandths

Independent Practice

For 4–6, write each number in standard form.
4. \[(3 \times 1) + \left(6 \times \frac{1}{100}\right)\]
5. \[(7 \times 1) + \left(3 \times \frac{1}{10}\right) + \left(4 \times \frac{1}{1000}\right)\]
6. five and twenty hundredths

For 7–10, write two decimals that are equivalent to the given decimal.
7. 3.300
8. 9.1
9. 9.60
10. 4.400
11. **MP.4 Model with Math** The annual fundraising goal of a college is $100,000. So far $58,743 has been raised. How much more money is needed to reach the goal?

12. Trisha has a ribbon that measures \((5 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (5 \times \frac{1}{1,000})\) meter. How can this measurement be written as a decimal?

13. **MP.2 Reasoning** How can you tell that 4.620 and 4.62 are equivalent decimals?

14. **MP.1 Make Sense and Persevere** During a sports assembly, 0.555 students wore something blue. The rest of the students wore something red. If there were 1,000 students at the assembly, how many were wearing blue? How many red?

15. Collette incorrectly placed the decimal point when she wrote 0.065 inch for the width of her tablet. What is the correct decimal number for the width?

16. **Higher Order Thinking** Meg shades 1 whole and \(\frac{1}{10}\), Corky shades \(\frac{1}{2}\), and Derek does not shade a grid. Shade the grids to show the fractions. Shade the grids to show the fractions. Shade the grids to show the fractions. What decimal represents the amount each student shades?

17. Find two decimals that are equivalent to \((6 \times 10) + (5 \times \frac{1}{100})\). Write the decimals in the box.
Another Example

Order the cockroaches from least to greatest length.

**Step 1**
Write the numbers, lining up the decimal points. Start at the left. Compare digits of the same place value.

- 3.576
- 3.432
- 3.582

3.432 is the least.

**Step 2**
Write the remaining numbers, lining up the decimal points. Start at the left. Compare.

- 3.576
- 3.582

3.582 is greater than 3.576.

**Step 3**
Write the numbers from least to greatest.

3.432  3.576  3.582

From least to greatest lengths are the Oriental, the American, and the Australian.

Do You Understand?

1. **MP.3 Critique Reasoning**
   Scientists measured a Madeira cockroach and found it to be 3.44 centimeters long. Toby says that the Madeira is shorter than the Oriental because 3.44 has fewer digits than 3.438. Is he correct? Explain.

Do You Know How?

For 2–3, write >, <, or = for each □.

2. 2.345 □ 3.509
3. 7.317 □ 7.203

For 4–5, order the decimals from least to greatest.

4. 4.540, 4.631, 4.625
5. 0.575, 1.429, 1.35, 0.593

Independent Practice

For 6–8, compare the numbers. Write >, <, or = for each □.

6. 0.790 □ 0.79
7. 5.783 □ 4.692
8. 6.717 □ 6.718

For 9–10, order the decimals from greatest to least.

9. 606.314, 606.219, 616.208
10. 234.639, 219.646, 234.630
11. **MP.3 Critique Reasoning** Explain why it is not reasonable to say that 6.24 is less than 6.231 because 6.24 has fewer digits after the decimal point than 6.231.

12. **Number Sense** Krystal wrote three numbers between 0.63 and 0.64. What numbers could Krystal have written?

13. **Vocabulary** Write an equivalent decimal for each given decimal.

   - 0.85
   - 1.6
   - 2.07
   - 1.02

14. Is 0.6 greater than or less than \( \frac{7}{10} \)? Draw a number line to show your answer.

15. **Higher Order Thinking** Team Spirit’s cheerleading scores were posted on the scoreboard in order from highest to lowest score. One digit in the team’s dance score is not visible. List all the possible digits for the missing number.

16. Team Extreme’s jumps score is 95.050. How does it compare to Team Spirit’s jumps score?

17. A grain of fine sand can have a diameter of 0.120 millimeter. Which numbers are less than 0.120?

   - 0.1
   - 0.10
   - 0.121
   - 0.122
   - 0.126

18. Kara weighed some oranges at the grocery store. The oranges weighed 4.16 pounds. Which numbers are greater than 4.16?

   - 4.15
   - 4.19
   - 4.2
   - 4.24
   - 4.26
**Another Example**

You can subtract decimals with grids. Use hundredths grids to find $1.57 - 0.89$.

**Step 1**
Shade 1 grid and 57 squares to show 1.57.

![Shaded grid](image)

**Step 2**
Cross out 8 columns and 9 squares of the shaded grid. The difference is the squares that are shaded but not crossed out.

![Crossed out grid](image)

$1.57 - 0.89 = 0.68$

**Guided Practice**

**Do You Understand?**
1. **MP.4 Model with Math** Explain how to use grids to find the difference between the monthly cost of using the DVD player and the dishwasher. Then find the difference.

**Do You Know How?**
For 2–7, use hundredths grids to add or subtract.

2. $1.45 + 0.37$
3. $0.89 + 0.41$
4. $4.89 - 0.94$
5. $1.45 - 0.76$
6. $0.41 - 0.37$
7. $2.28 + 0.6$

**Independent Practice**
For 8–11, add or subtract. Use hundredths grids to help.

8. $0.2 + 0.73$
9. $1.33 - 0.25$
10. $0.37 + 0.57$
11. $1.01 + 0.99$
12. **MP.3 Construct Arguments** How is adding 5.51 + 2.31 similar to adding $2.31 + $5.51?

14. Is the sum of 0.57 + 0.31 less than or greater than one? Explain.

13. **MP.4 Model with Math** Write an expression that is represented by the model below.

15. **Number Sense** Estimate to decide if the sum of 321 + 267 is more or less than 600.

16. **Higher Order Thinking** Do you think the difference of 1.45 – 0.97 is less than one or greater than one? Explain.

17. **Vocabulary** Estimate 53.7 – 27.5. Circle the compatible numbers to substitute.


18. **Algebra** Write an expression that can be used to find the perimeter of the pool shown to the right. Remember, perimeter is the distance around a figure.

**Common Core Assessment**

19. Each shaded area in the grids below represents a decimal.

**Part A**
What is the sum of the decimals?

**Part B**
Explain how you found your answer.
Another Example
Manuel walks a total of 0.75 mile to and from school each day. If there have been 105 school days so far this year, about how many miles has he walked in all?

Round to the nearest whole number.

\[105 \times 0.75\]
\[105 \times 1 = 105\]

Use compatible numbers.

\[105 \times 0.75\]
\[100 \times 0.8 = 80\]

Both methods provide reasonable estimates of how far Manuel has walked.

Guided Practice

Do You Understand?

1. **Number Sense**  There are about 20 school days in a month. About how many miles does Manuel walk each month? Write an equation to show your work.

2. **MP.2 Reasoning**  Without multiplying, which estimate in the Another Example do you think is closer to the exact answer? Explain your reasoning.

Do You Know How?

For 3–8, estimate each product using rounding or compatible numbers.

3.  \(2.87 \times 412\)  
4.  \(943 \times 1.98\)  
5.  \(107 \times 5.15\)  
6.  \(4.06 \times 73\)  
7.  \(41.05 \times 300\)  
8.  \(8.95 \times 21\)

Independent Practice

For 9–16, estimate each product.

9.  \(119 \times 2.8\)  
10.  \(4.7 \times 69\)  
11.  \(107 \times 2.3\)  
12.  \(35 \times 3.5\)

13.  \(1.6 \times 7\)  
14.  \(9.1 \times 53\)  
15.  \(39 \times 1.22\)  
16.  \(4 \times 7.8\)
21. The side lengths of a square measure 25.3 cm. Estimate the area of the square.

22. Higher Order Thinking Carol drives 23.5 miles to work and 21.7 miles round trip to school each day, Monday to Friday. How many miles does Carol drive in one week?

23. Rounding to the nearest tenth, which of the following give an underestimate?
   - 38.45 × 1.7
   - 28.54 × 0.74
   - 9.91 × 8.73
   - 78.95 × 1.25
   - 18.19 × 2.28

24. Rounding to the nearest whole number, which of the following give an overestimate?
   - 11.7 × 9.4
   - 4.48 × 8.3
   - 13.9 × 0.9
   - 0.63 × 1.5
   - 8.46 × 7.39
Another Example

Find a common denominator for \( \frac{7}{12} \) and \( \frac{5}{6} \). Then rename each fraction with an equivalent fraction.

**One Way**

Multiply the denominators to find a common denominator: \( 12 \times 6 = 72 \).

Write equivalent fractions with denominators of 72.

\[
\frac{7}{12} = \frac{7 \times 6}{12 \times 6} = \frac{42}{72} \quad \frac{5}{6} = \frac{5 \times 12}{6 \times 12} = \frac{60}{72}
\]

So, \( \frac{42}{72} \) and \( \frac{60}{72} \) is one way to name \( \frac{7}{12} \) and \( \frac{5}{6} \) with a common denominator.

**Another Way**

Think of a number that is a multiple of the other.

You know that 12 is a multiple of 6.

\[
\frac{5}{6} = \frac{5 \times 2}{6 \times 2} = \frac{10}{12}
\]

So, \( \frac{7}{12} \) and \( \frac{10}{12} \) is another way to name \( \frac{7}{12} \) and \( \frac{5}{6} \) with a common denominator.

Guided Practice

**Do You Understand?**

1. In the example on the previous page, how many twelfths are in each \( \frac{1}{3} \) section of Tyrone’s rectangle? How many twelfths are in each \( \frac{1}{4} \) section of Sally’s rectangle?

**Do You Know How?**

For 2–3, find a common denominator for each pair of fractions.

2. \( \frac{1}{6} \) and \( \frac{1}{2} \)
3. \( \frac{2}{3} \) and \( \frac{3}{4} \)

Independent Practice

For 4–11, find a common denominator for each pair of fractions. Then write equivalent fractions with the common denominator.

4. \( \frac{3}{5} \) and \( \frac{3}{8} \)
5. \( \frac{5}{8} \) and \( \frac{3}{4} \)
6. \( \frac{1}{3} \) and \( \frac{4}{5} \)
7. \( \frac{3}{12} \) and \( \frac{9}{8} \)

8. \( \frac{4}{7} \) and \( \frac{1}{2} \)
9. \( \frac{4}{5} \) and \( \frac{3}{4} \)
10. \( \frac{2}{8} \) and \( \frac{7}{20} \)
11. \( \frac{1}{9} \) and \( \frac{2}{3} \)
12. **MP.3 Critique Reasoning** Clara says the only common denominator of $\frac{3}{4}$ and $\frac{2}{3}$ is 20. Do you agree? Explain.

13. **Higher Order Thinking** The least common denominator is the least common multiple of the two denominators. What is the least common denominator of $\frac{3}{4}$ and $\frac{5}{6}$? Explain.

14. **MP.4 Model with Math** Gemma bought two cakes that are the same size. The first one was divided into 3 equal sections. The second one was divided into 2 equal sections. Gemma wants to cut the cakes so that there are 6 pieces in each cake. Draw on the pictures to show how Gemma should cut each cake.

15. **Number Sense** The table shows the price for three different sandwiches sold at a local deli. What are the prices of the sandwiches rounded to the nearest dollar? nearest dime?

<table>
<thead>
<tr>
<th>Sandwich</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ham</td>
<td>$3.89</td>
</tr>
<tr>
<td>Turkey</td>
<td>$4.09</td>
</tr>
<tr>
<td>Chicken</td>
<td>$3.79</td>
</tr>
</tbody>
</table>

16. Choose all the common denominators for $\frac{1}{3}$ and $\frac{2}{4}$.

- [ ] 8
- [ ] 12
- [ ] 16
- [ ] 36
- [ ] 48

17. Choose all the common denominators for $\frac{2}{5}$ and $\frac{4}{5}$.

- [ ] 12
- [ ] 15
- [ ] 30
- [ ] 60
- [ ] 72