For your Math homework in Weeks 1, 2, and 3, you will be using Geometry and Math to create art! Each week, you will have two art projects to complete at home using concepts you have studied in Geometry and Math this year and in previous years. For each concept, there is a small study guide to help you! You do not have to turn in your Math homework for Weeks 1 and 2. Everything will be turned in as a booklet at the end of Week 3! Enjoy!

**Week 1: Wednesday and Thursday**

**A Wild Design: Perpendicular and Parallel Lines**

**Study Guide:**

*Parallel Lines*: Lines that are side by side and will never touch, no matter how long we draw them!

*Perpendicular Lines*: Lines that meet at a right angle (they often look like a letter “T” or a letter “L”).

*Right angle*: 90 degrees. A square can be made in the corner of a right angle.

**Project**: In your project, you will be creating a drawing with only parallel and perpendicular lines. Start out with the sheet on the next page that has four parallel lines. From those lines, use a ruler or a straight edge to draw a perpendicular line (as shown on the right). You can use the **corner of a piece of paper** to help you draw the right angle! After this, you are free to draw lines in whatever direction! There is only one requirement: **EVERY LINE MUST BE EITHER PARALLEL OR PERPENDICULAR TO THE ORIGINAL LINES!**

Color your project after you finish! Good luck!

←Example of finished product
Week 1: Friday, Monday and Tuesday
Stained Glass Symmetry: Lines of Symmetry

Study Guide:
Line of Symmetry: If a figure or shape has a line of symmetry, it means both sides correspond in size, shape and position. In other words, each side of a line of symmetry looks like a mirror image.

Project: In this project, you will be creating a drawing that has a vertical line of symmetry. As you work, remember everything that is drawn on one side of the line of symmetry, must be drawn on the other side!

Step #1: Measure the top of your piece of paper. Make a dot in the center (where your ruler says 4 ¼ inches). Do the same thing on the bottom. (See Week 3 for a review on how to measure!)

Step #2: Measure the left side of your piece of paper. Make a dot in the center (where your ruler says 5 ½ inches). Do the same thing on the right side. (See Week 3 for a review on how to measure!)

Step #3: Connect all the dots to make a parallelogram (or a diamond).

Step #4: Draw a vertical line of symmetry on the diamond.

Step #5: Use only STRAIGHT lines to divide the right and left sides into smaller sections. Remember, whatever you draw on one side should be drawn symmetrically on the other side!!

Step #6: Color your design! Remember about the line of symmetry! Everything that is colored red on the left, must be colored red on the right!

Example of finished product→
Week 2: Wednesday, Thursday and Friday

A Pencil Drawing: Lines of Symmetry

See Study Guide for Week 1 to learn more about lines of symmetry!

Project: In this project, a line of symmetry has been drawn down the face of a wolf and the right side of the wolf’s face has been erased. Your job is to complete the right side of the wolf’s face. Remember, because it’s a line of a symmetry each side of the line of symmetry looks like a mirror image.

Step #1: Start by looking for the edges of the wolf head, nose, and eyes, and lightly sketch them in with a pencil. (See first drawing below as an example.)

Step #2: Look for the parts of the wolf that are a medium gray. Fill in all areas on your half, expect the areas that are white! (See second drawing below as an example.)

Step #3: Look for the darkest grays and add them on top, using more pressure from your pencil. (See third drawing below as an example.)

Step #4: Squint at the picture to see if there are any final tweaks. White areas that may have gotten smudged may be cleaned up with an eraser.
Week 2: Monday and Tuesday
A Geometric Monster: Measurement and Perimeter

Study Guide

**Polygon:** Any shape that has straight lines that are all connected.

**Pentagon:** A polygon with five sides.

**Quadrilateral:** A polygon with four sides.

**Trapezoid:** A quadrilateral with exactly one pair of parallel sides.

**Parallelogram:** A quadrilateral with two pairs of parallel sides.

**Square:** A parallelogram with four right angles and four congruent sides.

**Equilateral Triangle:** A three-sided polygon with three congruent sides.

**Isosceles Triangle:** A three-sided polygon with two congruent sides.

**Scalene Triangle:** A three-sided polygon with ZERO congruent sides.

**What does congruent mean?** Congruent means the “same.”

**Perimeter:** The distance around the object. Add up all the sides!

**Project:** You will be creating a measurement monster! Your measurement monster must have ten specific polygons and each polygon must have the specific perimeter described below.

**Step 1:** Use a ruler to draw the following polygons with the following perimeters on construction paper (from the classroom or from home):

- **Square**—Perimeter = 20 inches **(Hint: Ask _____ x 4 = 20)**
- **Rectangle**—Perimeter = 18 inches **(Hint: Ask (_____ + ______ ) x 2 = 18)**
- **Parallelogram**—Perimeter = 10 inches
- **Trapezoid**—Perimeter = 13 inches
- **Quadrilateral**—Perimeter = 14 inches
- **Equilateral Triangle**—Perimeter = 15 inches
- **Isosceles Triangle**—Perimeter = 17 inches **(Hint: Ask _____ + _____ x 2 = 17)**
- **Scalene Triangle**—Perimeter = 12 inches
- **Pentagon**—Perimeter = 10 inches
- **Polygon**—Perimeter = 8 inches

**Step 2:** Write the name of the shape and the perimeter on each polygon you created!

**Step 3:** Cut out each of your polygons.

**Step 4:** Glue your polygons to another piece of construction paper, in the form of a monster!

**Step 5:** Write the name of your monster at the top of the paper and decorate!
Study Guide: Simplest Form
1) Start with 2. Ask, “Can 2 go into the numerator and the denominator without a remainder?” If so, divide by 2. Start the process again with your new fraction.
2) If not, move on to 3. Ask, “Can 3 go into the numerator and the denominator without a remainder?” If so, divide by 3. Start the process again with your new fraction.
3) If not, move on to 4. Continue with 5, 6, 7, 8, 9, and 10.

\[
\frac{12}{28} \div 2 = \frac{6}{14} \div 2 = \frac{3}{7}, \quad \frac{6}{18} \div 2 = \frac{3}{9} \div 3 = \frac{1}{3}, \quad \frac{9}{18} \div 9 = \frac{1}{2}
\]

Project: You will be making a mosaic and recording the fractions of each color that you use!

Step #1: Fill a small baggie with mosaic tiles from the classroom. Check your name off the list so that we know you have taken your mosaic tiles home.

Step #2: Create a piece of art with your mosaic tiles! Requirement: Your total number of tiles used must be an EVEN number! (That means the total amount of tiles you use must end in 0, 2, 4, 6, or 8.)

Step #3: Record the colors of the tiles you used in the chart below.

Step #4: Describe the fraction of each color compared with the total number of tiles used.

Step #5: Write the fraction in simplest form.

Example:

<table>
<thead>
<tr>
<th>Color</th>
<th>Number of Tiles</th>
<th>Fraction of Total Tiles</th>
<th>Fraction in Simplest Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>8</td>
<td>(\frac{8}{32})</td>
<td>(\frac{1}{4})</td>
</tr>
<tr>
<td>Light blue</td>
<td>5</td>
<td>(\frac{5}{32})</td>
<td>(\frac{5}{32})</td>
</tr>
</tbody>
</table>

Example of finished products
# Mosaic Tile Fraction Project

Name: ____________________

Total Tiles Used: _____________

<table>
<thead>
<tr>
<th>Color</th>
<th>Number of Tiles</th>
<th>Fraction of Total Tiles</th>
<th>Fraction in Simplest Form</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Show work here or neatly on another piece of paper to demonstrate how you changed each fraction into its simplest form:
Week 3: Friday and Monday
Radial Squares: Measurement by ½ inch

Study Guide:
To measure an inch, look at the large numbers on the INCHES side of the ruler!

To measure a ½ inch, look for a long line half way between 0 and 1 on the INCHES side of the ruler! For 1 ½ inches, look half way between the 1 and 2!

To measure ¼ inches, look for a line half way between the 0 and the ½ mark. To measure ¾ inches, look for a line half way between the ½ mark and the whole inch.

Ask if you have any questions!

Project: For this project, we’re going to create radial squares. You will need two different colors of construction paper (four to five pieces for each color)! You may use the construction paper from the classroom or construction paper from home.

Step #1: On Color A, draw a square that is 1 inch on every side. We called this 1 inches².
Step #2: On Color B, draw a square that is 1 ½ inches².
Step #3: On Color A, draw a square that is 2 inches².
Step #4: On Color B, draw a square that is 2 ½ inches².
Step #5: On Color A, draw a square that is 3 inches².
Step #6: On Color B, draw a square that is 3 ½ inches².
Step #7: On Color A, draw a square that is 4 inches².
Step #8: On Color B, draw a square that is 4 ½ inches².
Step #9: On Color A, draw a square that is 5 inches².
Step #10: On Color B, draw a square that is 5 ½ inches².
Step #11: On Color A, draw a square that is 6 inches².
Step #12: On Color B, draw a square that is 6 ½ inches².

Step #13: Glue the squares from the smallest to the largest on top of each other. Each time you glue a square, rotate the square slightly.

Example of finished product
**Week 3: Tuesday**

**Project:** Tomorrow you will turn in your Math homework for the past three weeks. Create a cover for your math projects. Your cover should have the following items:

- A title
- Your name
- A drawing

Connect all of your work for the past three weeks into a booklet with your cover. Your booklet can be stapled or strung together with string, or connected in any other creative way!

**Week 4—5th Grade**

**Step #1:** At the top of a separate sheet of lined paper or graph paper, write your name and, “Week 4: Wednesday.”

**Step #2:** Write problems 1 through 4 on this separate sheet of paper and solve. Show all your work! Write fractions in simplest form. Write your division NOT with remainders by with decimals to the **HUNDRETHS** place value.

**Step #3:** Check your answers. The answers for 1 through 4 are written below. If you get them right, put a check. If not, figure out where you made your mistake. I will be looking not just for the correct answer, but for the correct work shown!

**Step #4:** For problems 5 and 6, write your answer in a complete sentence and show your work. If it asks you to explain, you must explain your answer. *You do not have to copy the story problem!*

**Week 4: Wednesday—4th Grade**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 7,643 x 9 =</td>
<td>68,787</td>
</tr>
<tr>
<td>2) ( \frac{5}{6} + \frac{3}{6} = )</td>
<td>( \frac{8}{6} = \frac{4}{3} )</td>
</tr>
<tr>
<td>3) 6,523 ÷ 5 =</td>
<td>1,304.6</td>
</tr>
<tr>
<td>4) 8,000 – 2,349 =</td>
<td>5,651</td>
</tr>
</tbody>
</table>

5) Miguel ate \( \frac{1}{5} \) of a small pizza and \( \frac{1}{5} \) of a large pizza. Does the sum \( \frac{1}{5} + \frac{1}{5} = \frac{2}{5} \) make sense in this situation? Explain your thinking.

6) A chocolate bar is made up of 12 equal pieces. Brittenum ate \( \frac{3}{4} \) of a chocolate bar. Maia ate 2/3 of the same kind of chocolate bar. Draw a representation of both chocolate bars to show how much Brittenum and Maia ate. Brittenum said that he ate more chocolate than Maia. Is he correct? Explain your thinking.

**Answers**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 68,687</td>
<td>2) ( 1 \frac{2}{6} = 1 \frac{1}{3} )</td>
</tr>
</tbody>
</table>
### Week 4: Thursday

1) \( 7,643 \times 8 = \)  
2) \( \frac{7}{8} + \frac{7}{8} = \)  
3) \( 6,523 \div 6 = \)  
4) \( 8,300 - 5,678 = \)

5) While working on a group project for homework three girls snacked on chocolate bars. Each girl had a chocolate bar of the same size. Samantha ate 1/2 of a chocolate bar, Miranda ate 3/4 of a chocolate bar and Shira ate 4/6 of a chocolate bar. a) Who ate the most chocolate? Explain. Justify your explanation with a visual model.

6) Two of the girls decided to eat the same amount of chocolate as the girl who are the most chocolate. How much more chocolate did they need to eat? Explain.

**Answers**

1) 61,144  
2) \( \frac{6}{8} = 1 \frac{3}{4} \)  
3) 1,087.16  
4) 2,622

### Week 4: Friday

1) \( 7,643 \times 7 = \)  
2) \( \frac{5}{9} + \frac{8}{9} = \)  
3) \( 6,523 \div 7 = \)  
4) \( 8,050 - 4,999 = \)

5) Anibal used the model below to help find the sum of \( \frac{1}{3} + \frac{1}{6} \). Does Anibal’s model make sense? Explain your reasoning.

![Diagram](image)

6) A red umbrella costs $8.00. A green umbrella costs 3 times as much as the red umbrella. How much does the green umbrella cost?

**Answers**

1) 53,501  
2) \( \frac{4}{9} \)  
3) 931.85  
4) 3,051

### Week 4: Monday

1) \( 7,643 \times 6 = \)  
2) \( \frac{5}{2} + \frac{3}{2} = \)  
3) \( 6,523 \div 8 = \)  
4) \( 8,000 - 3,636 = \)

5) Apollo and Ian share a whole pizza. The pizza is cut into 6 equal slices and put on two separate plates.  
A. What fraction of the pizza could be on each plate?  
B. Model 3 different ways Apollo and Ian could share the pizza. Write an equation for each model.  
C. What if 3 friends share the pizza and put the slices on 3 separate plates? What fraction of the pizza could be on each plate? Use models and equations to show your thinking.

**Answers**

1) 43,858  
2) 4  
3) 815.37  
4) 4,364

### Week 4: Tuesday

**Note: Tomorrow is the day to turn in your Week 4 Math homework!**

1) \( 7,643 \times 5 = \)  
2) \( \frac{7}{4} + \frac{3}{4} = \)  
3) \( 6,523 \div 9 = \)  
4) \( 8,020 - 1,212 = \)

5) After a class party 3¼ cartons of orange juice and 2¾ cartons of apple juice remained from the 10 cartons the teacher purchased. How much juice was used?

6) An equilateral triangle measures 5 ⅜ cm on one side. What is the perimeter of the triangle?

**Answers**

1) 38, 215  
2) \( 2 \frac{2}{4} = 2 \frac{1}{2} \)  
3) 724.77  
4) 6,808
Week 5

Study Guide for Adding and Subtracting Fractions with Unlike Denominators

\[
\frac{1}{4} + \frac{1}{3} = \frac{5}{12}
\]

1) Find the LCM of the denominators (in this case, 4 and 3). To do this, count by 4 and count by 3 until you come to a number that is the same!

2) The LCM is our new denominator! Put it next to our fractions!

\[
\frac{4}{12} + \frac{3}{12} = \frac{7}{12}
\]

3) Say, "Count by 4 but don't pass 12. 4, 8, 12. 4 \times 3 = 12. Times 3 on the top, times 3 on the bottom." Write \(\times 3\) by the numerator and denominator.

\[
\frac{3}{12}
\]

4) Say, "Count by 3 but don't pass 12. 3, 6, 9, 12. 3 \times 4 = 12. Times 4 on the top, times 4 on the bottom." Write \(\times 4\) by the numerator and denominator.

5) Multiply the numerator of the first fraction by \(\times 3\). \(1 \times 3 = 3\).

\[
\frac{3}{12}
\]

6) Multiply the numerator of the second fraction \(\times 4\). \(2 \times 4 = 8\).

\[
\frac{8}{12}
\]

7) Add the new numerators! \(3 + 8 = 11\). Write the new answer!

\[
\frac{11}{12}
\]

The process is the same for subtraction fractions. Repeat steps 1-6 and then subtract!
Week 5: Wednesday

1) \(8,902 \times 9 = \)
2) \(\frac{5}{9} - \frac{1}{3} = \)
3) \(3,459 \div 8 = \)
4) \(57,909 - 3,636 = \)
5) 286,489 is an odd number. How many times greater is the 8 in the ten thousands place than the 8 in the tens place? Explain your thinking.
6) A recipe calls for 2 ¼ cups of walnuts and 3 \(\frac{3}{8}\) cups of pecans. How many cups of nuts are needed in all for the recipe?

Answers

1) 80,118  
2) \(\frac{2}{9}\)  
3) 432.37  
4) 54,273

Week 5: Thursday

1) \(8,902 \times 8 = \)
2) \(\frac{7}{8} - \frac{2}{3} = \)
3) \(3,459 \div 6 = \)
4) \(29,002 - 5,678 = \)
5) There are two 3’s in the number 2,033,541. Jessica says that the 3 on the left is 10 times the value of the 3 on the right. Esperanza says the 3 on the right is \(\frac{1}{10}\) the value of the 3 on the left. Who is correct? Explain your thinking.
6) When painting my bedroom I used \(3\frac{1}{2}\) liters of blue paint and \(2\frac{1}{4}\) liters of red paint. How much paint did I use in all?

Answers

1) 71,216  
2) \(\frac{5}{24}\)  
3) 576.5  
4) 23,324

Week 5: Friday

1) \(8,902 \times 7 = \)
2) \(\frac{8}{7} + \frac{3}{4} = \)
3) \(3,459 \div 7 = \)
4) \(57,001 - 4,999 = \)
5) Why does the number 13,543 have a different value than 13,453? Explain your thinking.
6) Chelsea used \(6\frac{1}{4}\) liters to water her vegetable patch and \(2\frac{5}{8}\) liters to water the flower pots. How much water did Chelsea use on her garden?

Answers

1) 62,314  
2) \(\frac{59}{36} = 1 \frac{23}{36}\)  
3) 494.14  
4) 52,002

Week 5: Monday

1) \(8,902 \times 6 = \)
2) \(\frac{5}{2} - \frac{1}{3} = \)
3) \(3,459 \div 8 = \)
4) \(58,006 - 3,636 = \)
5) Two sides of a triangle measure \(5\frac{1}{2}\) cm. The third side measures \(3\frac{3}{8}\) cm. What is the perimeter of the triangle? What type of triangle is it?
6) On the weekend I spent \(6\frac{3}{5}\) hours reading and \(1\frac{1}{4}\) hours at the gym. How much less time did I spend at the gym than reading?

Answers

1) 53,412  
2) \(2\frac{1}{6}\)  
3) 432.37  
4) 54,370

Week 5: Tuesday

Note: Tomorrow is the day to turn in your Week 5 Math homework!

1) \(8,902 \times 5 = \)
2) \(\frac{6}{4} - \frac{1}{2} = \)
3) \(3,459 \div 9 = \)
4) \(89,090 - 1,212 = \)
5) A regular pentagon measures \(5\frac{1}{2}\) cm on one side. What is the perimeter of the pentagon?
6) My sister is 6 \(\frac{1}{2}\) years old. My brother is \(4\frac{3}{4}\) years younger than my sister. How old is my brother?

Answers

1) 44,510  
2) 1  
3) 384.33  
4) 87,878
**Study Guide for the Special Cases of Subtracting Fractions**

1) After finding the common denominator, subtract. Uh oh! We can’t do 2 - 3. That means we have to borrow from the whole number!

2) Scratch the whole number.

3) Make it smaller.

4) Move ONE WHOLE to the right. How many parts make up a whole? 8! That means add 8 to our fraction!

5) Now subtract! 10 - 3 = 7

4) Don’t forget to subtract your whole numbers!

3 - 1 = 2

---

**Week 6: Wednesday**

1) 7,643 x 62 =

2) 5 1/3 + 2 1/2 =

3) 59,856 ÷ 18 =

4) 79,000 - 3,636 =

5) An irregular shaped pentagon measures 5 1/3 cm on two sides. All other sides measure 4 3/4 cm. What is the perimeter of the pentagon?

6) Mike is 4 7/12 feet tall. His brother is 3 3/4 feet tall. How much taller is Mike than his brother?

**Answers**

1) 473,866

2) $\frac{7}{6}$

3) 3,325.33

4) 75,364

---

**Week 6: Thursday**

1) 7,643 x 28 =

2) 4 7/8 + 2 1/3 =

3) 59,856 ÷ 26 =

4) 97,900 - 5,678 =

5) Leo mixed $3\frac{3}{4}$ grams of blue paint with $1\frac{2}{5}$ grams of yellow paint to make green paint. How many grams of green paint did I mix?

6) Three ladders measure $5\frac{3}{4}$ meters, $4\frac{1}{2}$ meters, and $7\frac{2}{3}$ meters in length. What is the difference between the longest and shortest lengths?

**Answers**

1) 214,004

2) $\frac{29}{24} = 7 \frac{5}{24}$

3) 2,302.15

4) 92,222
**Week 6: Friday**

1) $7,643 \times 27 = \quad$ 2) $3 \dfrac{5}{9} + 5 \dfrac{1}{2} = \quad$ 3) $59,856 \div 37 = \quad$ 4) $95,090 - 4,999 =$

5) At the market I bought $2 \dfrac{3}{8}$ kg of cherries and $5 \dfrac{3}{4}$ kg of grapes. What was the total mass, in kilograms, of the fruit I bought?

6) The total length of two rugs is 10 meters. If one rug is $5 \dfrac{7}{8}$ meters, what is the length of the other rug?

**Answers**

1) 206,361  
2) $8 \dfrac{19}{18} = 9 \dfrac{1}{18}$  
3) 1,617.72  
4) 90,091

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**Week 6: Monday**

1) $7,643 \times 26 = \quad$ 2) $\dfrac{5}{2} + 3 \dfrac{3}{4} = \quad$ 3) $59,856 \div 48 =$  
4) $93,000 - 3,636 =$

5) In my first triathlon I ran for $5 \dfrac{1}{4}$ km, swam for $2 \dfrac{1}{2}$ km, and rode my racing bike for $4 \dfrac{2}{3}$ km. What was the total distance I completed in the triathlon?

6) Tom says that $4 - 1 \dfrac{1}{4}$ will be more than 3, since $4 - 1 = 3$. Do you agree or disagree? Explain your thinking.

**Answers**

1) 198,718  
2) $4 \dfrac{7}{36} - 5 \dfrac{11}{36} =$  
3) 1,247  
4) 89,364

---

**Week 6: Tuesday**

Note: Tomorrow is the day to turn in your Week 6 Math homework!

1) $7,643 \times 52 = \quad$ 2) $\dfrac{6}{4} + 6 \dfrac{1}{2} = \quad$ 3) $59,856 \div 59 =$  
4) $92,090 - 1,212 =$

5) Two items in a package have a combined weight of $6 \dfrac{1}{4}$ kg. If one item weighs $2 \dfrac{3}{8}$ kg what is the weight of the second item?

6) A building is 42 feet tall. It is 7 times as tall as Mr. Kepa. How tall is Mr. Kepa?

**Answers**

1) 397,436  
2) 8  
3) 1,014.50  
4) 90,878

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**Week 7:**

**Study Guide for Multiplicative Comparison Problems**

A tree is 32 feet tall. It is 8 times as tall as Jose. How tall is Jose?
Week 7: Wednesday

1) \(7,643 \times 36 = \)  
2) \(3 \frac{5}{6} + 6 \frac{3}{7} = \)  
3) \(6,523 \div 78 = \)  
4) \(99,000 - 3,636 = \)

5) Lisa has four CDs, Cynthia has three times as many as Lisa, and Megan has half as many as Lisa. How many CDs do Cynthia and Megan have?

6) 5½ meters of fabric is used to make curtains. \(2 \frac{7}{8}\) meters of fabric is used to make a flag. How much more fabric is used to make the curtains than the flag?

**Answers**

1) 275,148  
2) \(9 \frac{53}{42} = 10 \frac{11}{42}\)  
3) 83.62  
4) 95,364

---

Week 7: Thursday

1) \(7,643 \times 48 = \)  
2) \(5 \frac{3}{4} - 2 \frac{1}{8} = \)  
3) \(6,523 \div 36 = \)  
4) \(99,300 - 5,678 = \)

5) A tree is 24 feet tall. It is 4 times as tall as Mr. Smith. How tall is Mr. Smith?

6) A ball of string is \(6/8\) of a meter long. If I use \(1/2\) meter of the string to tie a package how much will be left?

**Answers**

1) 366,864  
2) \(3 \frac{3}{8}\)  
3) 181.19  
4) 93,622

---

Week 7: Friday

1) \(7,643 \times 27 = \)  
2) \(6 \frac{5}{9} - 4 \frac{2}{9} = \)  
3) \(6,523 \div 47 = \)  
4) \(99,050 - 4,999 = \)

5) Sue picked 30 apples. She picked 5 times as many apples as Bob. How many apples did Bob pick?

6) A running track is one kilometer long. If I jog for \(1/6\)km and run for \(2/3\) km will I complete the full distance of the track? Describe how you know.

**Answers**

1) 206, 361  
2) \(2 \frac{6}{9} = 2 \frac{2}{3}\)  
3) 138.78  
4) 94,051

---

Week 7: Monday

1) \(7,643 \times 96 = \)  
2) \(8 \frac{4}{9} - 6 \frac{3}{9} = \)  
3) \(6,523 \div 28 = \)  
4) \(99,000 - 3,636 = \)

5) Tom has 8 baseball cards. Jorge has 6 times as many cards. How many baseball cards does Jorge have?

6) I ate \(4/12\) of a box of donuts. My friend ate \(2/6\) more than I did. What fraction of the box of donuts did we eat in all?

**Answers**

1) 733,728  
2) \(2 \frac{6}{18} = 2 \frac{1}{2}\)  
3) 232.96  
4) 95,364

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Week 7: Tuesday

**Note:** Tomorrow is the day to turn in your Week 7 Math homework!

1) \(7,643 \times 15 = \)  
2) \(7 \frac{1}{4} - 5 \frac{2}{8} = \)  
3) \(6,523 \div 19 = \)  
4) \(99,020 - 1,212 = \)

5) Frankie and Tony went fishing. Tony caught 24 fish. He caught 6 times as many fish as Frankie. How many fish did Frankie catch?

6) Lisa bought \(6/8\) kilogram of bananas. She ate \(1/4\) kilogram of bananas on the way home. What fraction of the bananas was left?

**Answers**

1) 114,645  
2) \(2 \frac{4}{8} = 2 \frac{1}{2}\)  
3) 343.31  
4) 97,808
Project: Prime Numbers Exploration: Weeks 8-10

For weeks 8 through 10, you will be completing a booklet on PRIME numbers. The booklet will consist of a cover and the work from the following pages.
It is not due until the end of Week 10.

Watch Out for Prime Number Day!

NOTE: On Wednesday, November 13th, we will be celebrating Prime Number Day!
*How many prime numbers can you memorize?
* There will be a small prize for everyone who memorizes the first 25 prime numbers!
*There will be larger prizes for the three people who memorize the most prime numbers!

Week 8: Wednesday, Thursday, Friday

Study Guide:
- A **prime number** is a whole number greater than zero that has exactly two different factors—1 and the number itself.
  - For example, 5 is a prime number because it only has two factors—1 and 5.
- A **composite number** is a whole number greater than zero that has **more** than two different factors.
  - For example, 8 is a composite number because its factors are 1, 2, 4, and 8.
- What is a **factor**? A factor is a number that you can multiply together to get another number.
  - For example, what can you multiply to get 8? You can multiply 2 and 4. These are factors of 8.

Reminder: 1 is neither prime nor composite. It is not prime because it does not have exactly two factors. It is not composite because it does not have **more** than 2 factors. 1 is a very special number.

**FUN FACT:** Eratosthenes was a famous Greek mathematician who was born about 230 B.C. He was the chief librarian at the University of Alexandria in Egypt. This was the largest and the most famous library in the ancient world. He developed an interesting way to locate prime numbers. It is called the **Sieve of Eratosthenes** and it is still the easiest way to find prime numbers that exist below the number 10 million.
周8：周三

1) 在下一页，划掉数字1，因为它只有一个因数。它既不是素数也不是合数。

2) 找到一个绿色的标记器或绿色的彩色铅笔。圈出数字2，第一个素数，然后用对角线绿色线划掉所有2的倍数。

   a) 在一张有线的纸上或你的坐标纸上，描述你看到的2的倍数模式。

素数筛
**Week 8: Thursday**

1) Circle 3, and draw slanting red lines through every third number.
   b) On your lined sheet of paper or your graph paper, describe what pattern you see with the multiples of 3.

![Diagram showing multiples of 3 crossed out with red lines.]

2) Circle 5, and draw slanting black lines through every fifth number.
   c) On your lined sheet of paper or your graph paper, describe what pattern you see with the multiples of 5.

**Week 8: Friday**

1) Circle 7, and draw slanting blue lines through every seventh number.

![Diagram showing multiples of 7 crossed out with blue lines.]

2) Circle the remaining numbers that are not crossed out. These are the prime numbers between 1 and 100.
   d) On your lined sheet of paper or your graph paper, write how many prime numbers did you find?
   e) Describe why we did not have to go through the multiples of 8.
   f) Describe why we did not have to go through all the multiples of 9 or 10.
Week 8: Monday and Tuesday

**FUN FACT:** Two prime numbers that are separated by only ONE NUMBER are called “twin primes.”
- For example, 3 and 5 are twin primes. There is only one number that separates them—the number 4!

1) Below, complete the list of all twin primes less than 100. Also, find the sums and products of each pair of twin primes.

<table>
<thead>
<tr>
<th>Twin Primes</th>
<th>Sums</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 and 5</td>
<td>$3 + 5 = 8$</td>
<td>$3 \times 5 = 15$</td>
</tr>
<tr>
<td>5 and 7</td>
<td>$5 + 7 = 12$</td>
<td></td>
</tr>
<tr>
<td>11 and 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 and 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 and 31</td>
<td></td>
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<td>____ and ____</td>
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<td>____ and ____</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Week 9: Wednesday

a) On your lined sheet of paper or your graph paper, describe what pattern you see in the “SUMS” of the twin primes. **Challenge Question:** Can you give a reason why this pattern exists? What do you think?

Week 9: Thursday

b) On your lined sheet of paper or your graph paper, describe what pattern you see in the “PRODUCTS” of the twin primes. **Challenge Question:** Can you give a reason why this pattern exists? What do you think?

(HINT: Multiply the number that falls between each twin prime by itself. Compare that answer to the product of the twin primes. What do you notice?
For example, what number falls between 3 and 5? The number 4.
$4 \times 4 = 16$ $3 \times 5 = 15$

What number falls between 5 and 7? The number 6.
$6 \times 6 = 36$ $5 \times 7 = 35$)
**Week 9: Friday**

**Fun Facts:** Do you know what an **EMIRP** is? It is **prime** spelled backwards! It is a word used to describe numbers that make other prime numbers when the digits are reversed.

- For example, 17 is prime and 71 is also prime. 17 is the reverse of 71.

1) List all the emirps between 0 and 100 on your lined sheet of paper or your graph paper.
2) Describe what you notice about the digits of all these emirps.

**Week 9: Monday**

**Fun Facts:** Christian Goldbach was a famous Russian mathematician who was very much interested in prime numbers. Goldbach came up with an idea! His idea said, **“Every even number greater than 2 is the sum of two primes.”**

- For example:
  
  \[
  4 = 2 + 2 \\
  6 = 3 + 3 \\
  8 = 5 + 3 
  \]

1) Write every even number between 10 and 30. Next to it, write down two prime numbers that can be added together to make the even number like the example above.

**Goldbach’s idea still remains a “conjecture.”** A conjecture is an idea that no one can prove! People can find many numbers that work, just as you did, but no one has been able to prove without doubt that Goldbach’s idea will be true for every even number! Can you prove it?

**Week 9: Tuesday**

**Fun Facts:** Christian Goldbach made another “conjecture.” This conjecture said, **“Every odd number greater than 5 is the sum of THREE prime numbers.”**

- For example:
  
  \[
  7 = 3 + 2 + 2 \\
  9 = 3 + 3 + 3 \\
  11 = 5 + 3 + 3 
  \]

1) Write every odd number between 7 and 31. Next to it, write down three prime numbers that can be added together to make the odd number like the example above.
**Week 10: Wednesday**

**Fun Facts:** In 1976, a seventh grade student by the name of Arthur Hamann “conjectured” (that means, made a guess) that every even number is the difference between two primes.

- For example:  
  
  \[ 2 = 5 - 3 \]  
  \[ 4 = 7 - 3 \]  
  \[ 6 = 11 - 5 \]

1) Write every even number between 2 and 30. Next to each number, test Arthur’s idea with subtraction!

---

**Week 10: Thursday and Friday**

**Fun Facts:** A. de Polignac stated a conjecture very similar to Arthur Hamann’s conjecture. He said that every even number is the difference of two primes right next to each other in and **INFINITE** number of ways.

- For example, here are four pairs of prime numbers that are each next to each other, or are consecutive in order, that have a difference equaling 6:
  
  \[ 29 - 23 = 6 \]  
  \[ 37 - 31 = 6 \]  
  \[ 59 - 53 = 6 \]

1) For each even number between 2 and 10, find at least three pairs of “consecutive” primes, primes that are right next to each other that’s differences equal the even number.

\[
\begin{align*}
2 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 2 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 2 &= \underline{\phantom{10}} - \underline{\phantom{10}} \\
4 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 4 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 4 &= \underline{\phantom{10}} - \underline{\phantom{10}} \\
6 &= 29 - 23 & 6 &= 37 - 31 & 6 &= \underline{\phantom{10}} - \underline{\phantom{10}} \\
8 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 8 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 8 &= \underline{\phantom{10}} - \underline{\phantom{10}} \\
10 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 10 &= \underline{\phantom{10}} - \underline{\phantom{10}} & 10 &= \underline{\phantom{10}} - \underline{\phantom{10}}
\end{align*}
\]
Week 10: Monday

**Fun Fact:** Every composite number (that means, a number that is not prime) has a group of prime factors that, when multiplied together, will give you the composite number.

- For example,
  
  $$12 = 2 \times 3 \times 2 \quad (Try \ it! \ 2 \times 3 = 6 \ and \ 6 \times 2 = 12)$$

  $$15 = 3 \times 5$$

  $$24 = 2 \times 3 \times 2 \times 2$$

Because we are finding the factors that are prime, we call this prime factorization.

There’s a special way we do this. We call them **factor trees! 😊**

1) We write our composite number.
2) We think of two factors that will multiply to give us that number
3) We write those factors and connect them with branches.
4) We circle all the prime numbers—the leaves of our tree.
5) If any number isn’t circled, we go back to Step 2 and repeat!

![Factor Trees](image)

1) Choose five composite numbers between 20 and 40. Draw the **factor trees** and write the **prime factorization** for each of the composite numbers.

Week 10: Tuesday

**Note:** Tomorrow is the day to turn in your Weeks 8-10 Math homework!

You have done a lot of work with prime numbers over the past three weeks! You are almost done! Congratulations! Your last step is to create a cover for your booklet!

1) Create a title and decorate your cover in a creative manner!
2) In some fashion (staple, tie, place in a folder, etc.,), connect the pages of this project! Make sure you include the project pages from the homework packet (these papers!).
Week 11:

Study Guide: Relating Fractions to Division

A fraction can represent the division of one whole number by another whole number into equal fractional parts.

Example: Tom, Jack, Lisa and Jane combine their money to buy three large pizzas. If they share the pizzas equally, what fraction of a whole pizza does each friend eat? I need to find $3 \div 4$ friends. I will draw a fraction model of 3 pizzas and divide each pizza into 4 equal parts.

Each friend eats $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$ of a pizza. $3 \div 4 = \frac{3}{4}$.

Week 11: Wednesday

1) $84,569 \times 19 = \hspace{2cm} 2) \frac{1}{6} + \frac{3}{4} = \hspace{2cm} 3) 13,207 \div 15 = \hspace{2cm} 4) 13,507 - 12,349 = \hspace{2cm} 5) \text{Liam and Sam shared a chocolate bar. Liam ate} \frac{4}{12} \text{ and Sam ate} \frac{3}{6}. \text{Who ate more? How much more?} \hspace{2cm} 6) \text{Jessica and her 7 friends share 3 liters of apple juice equally. How much juice does each friend get?}

Answers

1) 68,687 \hspace{2cm} 2) \frac{22}{24} = \frac{11}{12} \hspace{2cm} 3) 880.46 \hspace{2cm} 4) 5,651

Week 11: Thursday

1) $84,569 \times 28 = \hspace{2cm} 2) \frac{7}{6} + \frac{1}{3} = \hspace{2cm} 3) 13,207 \div 26 = \hspace{2cm} 4) 13,507 - 5,678 = \hspace{2cm} 5) \text{Lia ran} \frac{2}{3} \text{ of a marathon. Julia ran} \frac{5}{6} \text{ of a marathon. Who ran farther? How much farther?} \hspace{2cm} 6) \text{Jack bakes 10 trays of cookies using 8 cups of milk. How many cups of milk does he use for each tray of cookies?}

Answers

1) 61,144 \hspace{2cm} 2) \frac{29}{24} = 1 \frac{5}{24} \hspace{2cm} 3) 507.96 \hspace{2cm} 4) 2,622

Week 11: Friday

1) $84,569 \times 37 = \hspace{2cm} 2) \frac{5}{6} + \frac{8}{9} = \hspace{2cm} 3) 13,207 \div 37 = \hspace{2cm} 4) 13,507 - 4,999 = \hspace{2cm} 5) \text{At a class party} \frac{4}{8} \text{ of a vegetarian pizza and} \frac{1}{4} \text{ of a cheese pizza were eaten. How much pizza was eaten altogether?} \hspace{2cm} 6) \text{A group of 8 office workers order 12 packs of sushi from the local Japanese restaurant for lunch. If the packs of sushi are shared equally, what fraction of a pack will each office worker get for lunch?}

Answers

1) 53,501 \hspace{2cm} 2) \frac{31}{18} = 1 \frac{13}{18} \hspace{2cm} 3) 356.94 \hspace{2cm} 4) 3,051
Week 11: Monday

1) $84,569 \times 46 = \phantom{0}$

2) $\frac{5}{6} + \frac{3}{5} = \phantom{0}$

3) $13,207 \div 48 = \phantom{0}$

4) $13,507 - 3,636 = \phantom{0}$

5) Luz makes 6 identical flags from 10 meters of fabric. How many meters of fabric does she use for each flag?

6) Mr. Smith paints 5 wooden chairs in 4 hours. If each chair takes the same amount of time to paint, what fraction of an hour does it take Mr. Smith to paint one chair?

**Answers**

1) 43,858

2) $\frac{43}{30} = 1 \frac{13}{30}$

3) 275.14

4) 4,364

Week 11: Tuesday

**Note:** Tomorrow is the day to turn in your Week 11 Math homework!

1) $84,569 \times 55 = \phantom{0}$

2) $\frac{7}{8} + \frac{3}{4} = \phantom{0}$

3) $13,207 \div 59 = \phantom{0}$

4) $13,507 - 11,212 = \phantom{0}$

5) The six fifth graders order 15 cookies to share amongst themselves. If the cookies are shared equally, how many cookies will each fifth grader receive?

6) Shaima baked 12 cupcakes using 2 cups of milk. How many cups of milk did she use for each cupcake?

**Answers**

1) 38, 215

2) $\frac{13}{8} = 1 \frac{5}{8}$

3) 223.84

4) 6,808

Week 12

**Study Guide:**

*Multiplying fractions on a grid.*

1) What family is the first fraction? Draw a line horizontally of that number (in this case, 4).

2) What family is the second fraction? Draw a line vertically of that number (in this case, 5).

3) Draw the rectangle.

4) Going vertically, color 2 out of 5 in each column with one colored pencil.

5) Going horizontally, color 3 out of 4 in each row with a different colored pencil.

**Week 12: Wednesday**

1) $12,007 \times 29 = \phantom{0}$

2) $\frac{2}{3} \div \frac{3}{9} = \phantom{0}$

3) 90,027 $\div 28 = \phantom{0}$

4) 57,909 $- 9,638 = \phantom{0}$

5) Show on graph paper how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

$\frac{1}{4} \times \frac{2}{3} = \phantom{0}$

6) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

$\frac{1}{3} \times \frac{2}{3} = \phantom{0}$

**Answers**

1) 80,118

2) $\frac{3}{9}$

3) 3,215.25

4) 54,273
**Week 12: Thursday**

1) \(12,007 \times 28 = \)

2) \(\frac{7}{8} \div \frac{2}{3} = \)

3) \(90,027 \div 26 = \)

4) \(29,002 - 9,608 = \)

5) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{3}{4} \times \frac{2}{3} = \)

6) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{2}{3} \times \frac{2}{3} = \)

**Answers**

1) 71,216

2) \(\frac{5}{24} = \)

3) 3,462.57

4) 23,324

---

**Week 12: Friday**

1) \(12,007 \times 27 = \)

2) \(\frac{8}{9} \div \frac{2}{5} = \)

3) \(90,027 \div 27 = \)

4) \(57,001 - 9,908 = \)

5) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{1}{2} \times \frac{2}{3} = \)

6) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{3}{4} \times \frac{2}{3} = \)

**Answers**

1) 62,314

2) \(\frac{22}{45} = \)

3) 3,334.33

4) 52,002

---

**Week 12: Monday**

1) \(12,007 \times 26 = \)

2) \(\frac{5}{8} \div \frac{1}{2} = \)

3) \(90,027 \div 88 = \)

4) \(58,006 - 9,638 = \)

5) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{1}{2} \times \frac{1}{3} = \)

6) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{1}{2} \times \frac{2}{4} = \)

**Answers**

1) 53,412

2) \(\frac{1}{8} = \)

3) 1,023.03

4) 54,370

---

**Week 12: Tuesday**

Note: Tomorrow is the day to turn in your Week 12 Math homework!

1) \(12,007 \times 25 = \)

2) \(\frac{6}{4} \div \frac{1}{3} = \)

3) \(90,027 \div 29 = \)

4) \(89,090 - 9,218 = \)

5) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{1}{2} \times \frac{2}{5} = \)

6) Show how you can solve the problem below by dividing a rectangle (as shown in the study guide.)

\(\frac{1}{5} \times \frac{1}{2} = \)

**Answers**

1) 44,510

2) \(\frac{14}{12} = 1 \frac{2}{12} = 1 \frac{1}{6} = \)

3) 3,104.37

4) 87,878
### Week 13: Wednesday

1) $7,643 \times 333 =$  

2) $\frac{1}{2} + \frac{4}{3} =$  

3) $59,856 \div 23 =$  

4) $79,000 \ - \ 56,636 =$  

**Please write your quotients with decimals not remainders.**

5) A recipe for chocolate muffins calls for $\frac{1}{4}$ cup of oil. You are making $\frac{1}{2}$ of the recipe. How much oil should you use?

6) At a restaurant, $\frac{2}{3}$ of the dishes on the menu are vegetarian. Of the vegetarian dishes, $\frac{2}{3}$ are pasta dishes. What fraction of the dishes on the menu are vegetarian pasta dishes?

**Answers**

1) 2,545,119  

2) $9\frac{5}{6}$  

3) 2,602.43  

4) 22,364  

### Week 13: Thursday

1) $7,643 \times 444 =$  

2) $4\frac{1}{2} + 2\frac{7}{8} =$  

3) $59,856 \div 25 =$  

4) $97,900 \ - \ 45,678 =$  

5) At the Children’s Zoo, $\frac{1}{8}$ of the animals are primates. $\frac{1}{4}$ of the primates are monkeys. What fraction of the animals are monkeys?

6) A piece of land is $\frac{3}{4}$ kilometer wide. Its length is $5 \frac{1}{2}$ times as long as it is wide. How long is the land?

**Answers**

1) 3,393,492  

2) $7\frac{3}{8}$  

3) 2394.24  

4) 52,222  

### Week 13: Friday

1) $7,643 \times 555 =$  

2) $3\frac{1}{2} + 5\frac{8}{9} =$  

3) $59,856 \div 12 =$  

4) $95,090 \ - \ 94,999 =$  

**Step 1:** Look at the decimals below.  

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.80</td>
<td>0.49</td>
<td>0.12</td>
<td>0.02</td>
<td>0.35</td>
<td>0.9</td>
<td>0.96</td>
</tr>
<tr>
<td>0.06</td>
<td>0.58</td>
<td>1.06</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step 2:** Write the decimals in three groups: Near 0, About $\frac{1}{2}$, and Close to 1  

**Step 3:** Add 3 new decimals to each of the three groups.

**Answers**

1) 4,241,865  

2) $8\frac{17}{18}$  

3) 4,988  

4) 91  

### Week 13: Monday

1) $7,643 \times 666 =$  

2) $1\frac{5}{9} + 3\frac{3}{5} =$  

3) $59,856 \div 58 =$  

4) $93,000 \ - \ 23,636 =$  

5) Grandma’s cookie recipe calls for $\frac{1}{5}$ of a cup of sugar. How much sugar will Grandma need to make $\frac{3}{4}$ of a batch of cookies?

6) 2½ crates of apples are delivered to the green grocers on Monday morning. $\frac{2}{5}$ of the apples in each crate are green apples. How many crates would it take to deliver only the green apples?

**Answers**

1) 5,090,238  

2) $5\frac{7}{45}$  

3) 1,032  

4) 69,364  

### Week 13: Tuesday

**Note:** Tomorrow is the day to turn in your Week 13 Math homework!

1) $7,643 \times 777 =$  

2) $\frac{1}{4} + 6\frac{3}{5} =$  

3) $59,856 \div 89 =$  

4) $92,090 \ - \ 9,242 =$  

5) One half of the students in 5th grade play a musical instrument. Of the students who play a musical instrument, $\frac{1}{4}$ play the violin. What fraction of the 5th grade students play the violin?

6) Last week, Jake spent 6¼ hours reading. Lia spent 3/5 as many hours as Jake reading. How many hours did Lia spend reading?

**Answers**

1) 5,938,611  

2) $6\frac{16}{20} = 6\frac{4}{5}$  

3) 672.53  

4) 82,848
**Week 14: Wednesday**

1) $7,643 \times 888 = $  
2) $3 \frac{1}{3} + 6 \frac{3}{7} = $  
3) $6,523 \div 28 = $  
4) $99,000 - 3,006 = $  

5) A restaurant sells curried cashew soup. On Monday the cook uses $\frac{3}{5}$ of a bag of cashews. On Tuesday the cook uses $\frac{1}{2}$ as many cashews as on Monday. What fraction of a bag of cashews does the cook use on Tuesday? 

6) John buys $\frac{4}{5}$ of a kilogram of mixed nuts. If $\frac{1}{2}$ of the mixed nuts are almonds, how many kilograms of almonds does John buy? 

**Answers**  
1) 6,786,984  
2) $9 \frac{16}{21}$  
3) 232.96  
4) 95,994  

**Week 14: Thursday**

1) $7,643 \times 999 = $  
2) $5 \frac{1}{2} - 3 \frac{7}{8} = $  
3) $6,523 \div 76 = $  
4) $99,300 - 5,008 = $  

5) $\frac{4}{5}$ of the music in Mr. Jones’ CD collection is classical. $\frac{2}{3}$ of the classical music CDs feature a violin solo. What fraction of Mr. Jones’ CD collection is classical music that features a violin solo? 

6) Dad made strawberry jam and raspberry jam. He made enough strawberry jam to fill $\frac{1}{2}$ a large jar. If he made $4\frac{1}{2}$ times as much raspberry jam as strawberry jam, how many large jars did the raspberry jam fill? 

**Answers**  
1) 7,635,357  
2) $2 \frac{1}{8}$  
3) 85.82  
4) 94,292  

**Week 14: Friday**

1) $7,643 \times 200 = $  
2) $6 \frac{5}{10} - 3 \frac{2}{9} = $  
3) $6,523 \div 147 = $  
4) $99,050 - 61,009 = $  

5) At Sunrise High School, $\frac{2}{3}$ of the students play a team sport. $\frac{1}{2}$ of the students who play a team sport are in basketball teams. What fraction of the students are in basketball teams? 

6) On Friday night, Mateo ordered pizza for dinner. When he was finished with dinner, $\frac{1}{2}$ of the pizza was left, so he put it in the refrigerator. On Saturday, Mateo ate $\frac{1}{2}$ of the leftover pizza. How much of the pizza did Mateo eat on Saturday? 

**Answers**  
1) 1,528,600  
2) $3 \frac{52}{90} = 2 \frac{26}{45}$  
3) 44.37  
4) 38,041  

**Week 14: Monday**

1) $7,643 \times 203 = $  
2) $8 \frac{2}{7} - 7 \frac{1}{15} = $  
3) $6,523 \div 178 = $  
4) $99,000 - 36,036 = $  

5) In a garden, $\frac{1}{8}$ of the flowers are tulips. $\frac{1}{4}$ of the tulips are red. What fraction of the flowers in the garden are red tulips? 

6) $\frac{1}{2}$ of the cakes at Bob’s Bakery have chocolate frosting. $\frac{7}{10}$ of the cakes with chocolate frosting have raspberry filling. What fraction of the cakes has both chocolate frosting and raspberry filling? 

**Answers**  
1) 1,551,529  
2) $1 \frac{1}{15}$  
3) 36.64  
4) 62,964  

**Week 14: Tuesday**

**Note:** Tomorrow is the day to turn in your Week 14 Math homework! 

1) $7,643 \times 505 = $  
2) $7 \frac{2}{4} - 5 \frac{1}{2} = $  
3) $6,523 \div 89 = $  
4) $99,020 - 10,002 = $  

Happy End of this Homework Packet!!! 

**Answers**  
1) 3,859,715  
2) $2 \frac{1}{4}$  
3) 73.29  
4) 89,018