Chapter One: Place Value, Multiplication, and Expressions of Whole Numbers

Part 1: Complete the table.

<table>
<thead>
<tr>
<th>Standard Form</th>
<th>Expanded Form</th>
<th>Word Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>42,050,371.06</td>
<td></td>
<td>thirty seven million, two hundred fifteen thousand and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>eighteen thousandths</td>
</tr>
<tr>
<td>700,000 + 50,000 + 4,000 + 30 + 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>10 times as much as</th>
<th>1/10 of</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>200</td>
<td>2</td>
</tr>
<tr>
<td>5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Write the value of the underlined digit.

1. 67,374,015
2. 5,308
3. 24,965,007
Complete the equations. Then, tell which property you used. You may use the word box of properties below for help.

1. \((5 \times 3) \times 7 = \) \(\) \((3 \times 7)\)

2. \(16 + 35 = 35 + \) \(\)

3. \(59 \times 12 = 12 \times \) \(\)

4. \(0 + \) \(\) \(= 24\)

5. \(1 \times \) \(\) \(= 73\)

<table>
<thead>
<tr>
<th>commutative property of addition</th>
<th>associative property of multiplication</th>
<th>identity property of multiplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>identity property of addition</td>
<td>commutative property of multiplication</td>
<td>distributive property</td>
</tr>
</tbody>
</table>

Find the product. Then, estimate to check that your answer makes sense.

\[
\begin{array}{cccc}
397 & \times & 5 & \quad & 78 & \times & 71 \\
\hline
\quad & \quad & \quad & \quad & \quad & \quad & \quad \\
\end{array}
\]
Solve each word problem.

1. Alice is training for the marathon. She runs 21 miles each month. How many miles will she run in 8 months?

2. Magen David Yeshivah buys 108 trees to plant in Israel. Each tree costs $26. What is the total cost of the trees?

3. Carole wants to plant a flower garden. She buys 114 flowers and wants to plant 6 equal rows of flowers. How many flowers will she plant in each row?
1.) Use compatible numbers to estimate the quotient.
   
   \[1353 \div 61\]

2.) Divide. Check your answer using multiplication.
   
   \[680 \div 8\]

3.) Divide. Check your answer using multiplication.
   
   \[529 \div 37\]

4.) Taylor took 560 photos during summer vacation. She placed 12 photos on each page of her scrapbook, but she had fewer than 12 photos to place on the last page. How many photos did Taylor place on the last page of her scrapbook?

5.) Lauren bought a television that costs $906. She plans to make equal payments of $28 each month, until the television is paid in full. About how many payments will Lauren make?

6.) The local concert hall has 48 concerts scheduled this season. Each concert has the same amount of tickets available for sale. There is a total of 4,560 tickets. How many tickets are available for each concert?
### Chapter 3 – Add and Subtract Decimals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) $2.46 + 0.789 =$</td>
<td>2) $10.6 - 6.38 =$</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Compare using $&lt;$, $&gt;$, or $=$</td>
<td>4) What is the value of the underlined digit?</td>
</tr>
<tr>
<td>a) $6.52 \underline{2}$ $6.520$</td>
<td></td>
</tr>
<tr>
<td>b) $.07 \underline{3}$ .3</td>
<td>$8.702$</td>
</tr>
</tbody>
</table>

5) Marco read that a honeybee can fly up to 2.548 meters per second. He rounded the number to 2.55. To which place value did Marco round the speed of a honeybee?

6) Jan ran 1.256 miles on Monday, 1.265 miles on Wednesday, and 1.268 miles on Friday. What were her distances from greatest to least?

7) Doug bought a pair of sneaker for $47.82 and a shirt for $13.36. If Doug had $100 before his purchase, about how much money does Doug have left?
<table>
<thead>
<tr>
<th>1.) Use patterns to find the product.</th>
<th>2.) Estimate and solve.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 \times 0.75 =</td>
<td>14 \times 0.89</td>
</tr>
<tr>
<td>10 \times 0.75 =</td>
<td></td>
</tr>
<tr>
<td>100 \times 0.75 =</td>
<td>Estimation:____________</td>
</tr>
<tr>
<td>1,000 \times 0.75 =</td>
<td>Product:____________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.) Complete the pattern.</th>
<th>4.) Estimate to compare products. &lt;, &gt;, or =</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10^0 \times 17.55 =)</td>
<td>a) 52 \times 0.35 ______ 16 \times 9.18</td>
</tr>
<tr>
<td>(10^1 \times 17.55 =)</td>
<td></td>
</tr>
<tr>
<td>(10^2 \times 17.55 =)</td>
<td>b) 71 \times 8.3 ________ 83 \times 0.71</td>
</tr>
<tr>
<td>(10^3 \times 17.55 =)</td>
<td></td>
</tr>
</tbody>
</table>

5.) Marcy mailed 9 letters at the post office. Each letter weighed 3.5 ounces. What was the total weight of the letters that Marcy mailed?

6.) Peter spent $32.50 at the ballpark. Marty spent 5 times as much money as Peter spent. Callie spent $27.25 more than Marty. How much money did Callie spend at the ballpark?

7.) Tina is making a special dessert for her brother’s birthday. Tina’s recipe calls for 0.4 kilograms of flour. The recipe also calls for an amount of sugar that is 0.2 times as much as the amount of flour. How much sugar will Tina need to make her dessert?
1.) Complete the pattern

<table>
<thead>
<tr>
<th>546 ÷ 1 = ________</th>
<th>546 ÷ 10 = ________</th>
</tr>
</thead>
<tbody>
<tr>
<td>546 ÷ 100 = ________</td>
<td>546 ÷ 1000 = ________</td>
</tr>
</tbody>
</table>

2.) Estimate the quotient.

419.5 ÷ 6 = ________

Show how you’ve estimated.

3.) Divide:

520.55 ÷ 5

4.) Divide:

410.2 ÷ 0.4
5.) A school bought 1,000 erasers as part of an order for supplies. The total cost of erasers was $20 dollars. What was the cost of one eraser?

6.) Bobby rode his bicycle for 32.7 miles in 5 hours. What is the best estimate for how far he rode in 1 hour?

7.) A stock boy at a grocery store stacked 12 cans to make a display. The height of the cans was 40.8 centimeters. If the cans of tuna were all the same height, what was the height of each can of tuna?
### Chapter 6: Add and Subtract Fractions with Unlike Denominators

<table>
<thead>
<tr>
<th>1.) Find the difference. Please remember to write your answer in <strong>simplest form.</strong></th>
<th>2.) Find the sum. Please remember to write your answer in <strong>simplest form.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{3}{4} - \frac{7}{12} )</td>
<td>( \frac{5}{8} + \frac{13}{24} = )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.) Compare the set of fractions using &gt;, &lt;, or equal to. Explain your reasoning.</th>
<th>4.) ( \frac{7}{3} - \frac{4}{5} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{7}{8} )</td>
<td>( \frac{7}{10} )</td>
</tr>
</tbody>
</table>
5.) Rebecca bought apples and peaches to cut up for a fruit salad. She bought $2 \frac{3}{4}$ pounds of apples, and $1 \frac{2}{5}$ pounds of bananas. How many pounds of fruit did she buy altogether?

6.) It takes Jonathan and his family $5 \frac{6}{9}$ hours to drive home from vacation. So far they have driven $1 \frac{8}{9}$ hours. How many more hours does Jonathan’s family need to drive?

7.) On Wednesday, Jacob ran $8 \frac{6}{7}$ miles to help him train for a marathon. His friend Aaron is training for the same marathon and ran $5 \frac{1}{21}$ miles that same day. What is the best estimate of how many more miles Jacob ran than Aaron?
Chapter 7: Multiplying Fractions
Solve. Please be sure to write all answers in simplest form.

1) \( \frac{6}{10} \times \frac{5}{12} = \)

2) \( 2 \times \frac{3}{5} = \)

3) \( 2 \frac{1}{10} \times 3 = \)

4) \( 5 \frac{1}{3} \times 2 \frac{1}{4} = \)

5) Louis bought \( \frac{8}{9} \) pound of potatoes. He used \( \frac{3}{4} \) of the potatoes for dinner. How many pounds of the potatoes did Susie use?

6) Luke read \( \frac{1}{4} \) of the pages of the class book report book. Laura read \( 1 \frac{1}{3} \) times as many pages as Luke. If the book has 150 pages, how many pages has Laura read?

7) Max took a test with 30 questions. He got \( \frac{3}{5} \) of the questions correct. How many questions did he get \textit{wrong}?