Exit Ticket Packet
Lesson 1: Interpreting Division of a Fraction by a Whole Number—Visual Models

Exit Ticket

Write an equivalent multiplication expression. Then, find the quotient in its simplest form. Use a model to support your response.

1. \( \frac{1}{4} \div 2 \)

2. \( \frac{2}{3} \div 6 \)
Lesson 2: Interpreting Division of a Whole Number by a Fraction—Visual Models

Exit Ticket

Solve each division problem using a model.

1. Henry bought 4 pies, which he plans to share with a group of his friends. If there is exactly enough to give each member of the group one-sixth of the pie, how many people are in the group?

2. Rachel finished $\frac{3}{4}$ of the race in 6 hours. How long was the entire race?
Lesson 3: Interpreting and Computing Division of a Fraction by a Fraction—More Models

Exit Ticket

Find the quotient. Draw a model to support your solution.

1. \[ \frac{9}{4} \div \frac{3}{4} \]

2. \[ \frac{7}{3} \div \frac{2}{3} \]
Lesson 4: Interpreting and Computing Division of a Fraction by a Fraction—More Models

Exit Ticket

Calculate each quotient. If needed, draw a model.

1. \( \frac{9}{4} ÷ \frac{3}{8} \)

2. \( \frac{3}{5} ÷ \frac{2}{3} \)
Lesson 5: Creating Division Stories

Exit Ticket

Write a story problem using the measurement interpretation of division for the following: \( \frac{3}{4} \div \frac{1}{8} = 6 \).
Lesson 6: More Division Stories

Exit Ticket

Write a story problem using the partitive interpretation of division for the following: \( 25 \div \frac{5}{8} = 40 \).
Lesson 7: The Relationship Between Visual Fraction Models and Equations

Exit Ticket

1. Write the reciprocal of the following numbers.

<table>
<thead>
<tr>
<th>Number</th>
<th>7/10</th>
<th>1/2</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocal</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Rewrite this division expression as an equivalent multiplication expression: \( \frac{5}{8} \div \frac{2}{3} \).

3. Solve Problem 2. Draw a model to support your solution.
Lesson 8: Dividing Fractions and Mixed Numbers

Exit Ticket

Calculate the quotient.

1. \( \frac{3}{4} \div 5 \frac{1}{5} \)

2. \( \frac{3}{7} \div 2 \frac{1}{2} \)

3. \( \frac{5}{8} \div 6 \frac{5}{6} \)

4. \( \frac{5}{8} \div 8 \frac{3}{10} \)
Lesson 9: Sums and Differences of Decimals

Exit Ticket

Solve each problem. Show that the placement of the decimal is correct through either estimation or fraction calculation.

1. \(382 \frac{3}{10} - 191 \frac{87}{100}\)

2. \(594 \frac{7}{25} + 89 \frac{37}{100}\)
Lesson 10: The Distributive Property and the Products of Decimals

Exit Ticket

Complete the problem using partial products.

500 \times 12.7
Lesson 11: Fraction Multiplication and the Product of Decimals

Exit Ticket

Use estimation or fraction multiplication to determine if your answer is reasonable.

1. Calculate the product. 78.93 × 32.45

2. Paint costs $29.95 per gallon. Nikki needs 12.25 gallons to complete a painting project. How much will Nikki spend on paint? Remember to round to the nearest penny.
Lesson 12: Estimating Digits in a Quotient

Exit Ticket

Round to estimate the quotient. Then, compute the quotient using a calculator, and compare the estimation to the quotient.

1. \(4,732 \div 13\)

2. \(22,752 \div 16\)
Lesson 13: Dividing Multi-Digit Numbers Using the Algorithm

Exit Ticket

Divide using the division algorithm: 392,196 ÷ 87.
Lesson 14: The Division Algorithm—Converting Decimal Division into Whole Number Division Using Fractions

Exit Ticket

Estimate quotients. Convert decimal division expressions to fractional division expressions to create whole number divisors. Compute the quotient using the division algorithm. Check your work with a calculator and your estimate.

1. Lisa purchased almonds for $3.50 per pound. She spent a total of $24.50. How many pounds of almonds did she purchase?

2. Divide: 125.01 ÷ 5.4.
Lesson 15: The Division Algorithm—Converting Decimal Division into Whole Number Division Using Mental Math

Exit Ticket

Evaluate the expression using mental math techniques and the division algorithm. Explain your reasoning.

\[ 18.75 \div 2.5 \]
Lesson 16: Even and Odd Numbers

Exit Ticket

Determine whether each sum or product is even or odd. Explain your reasoning.

1. $56426 + 17895$

2. $317362 \times 129324$

3. $10481 + 4569$

4. $32457 \times 12781$

5. Show or explain why $12 + 13 + 14 + 15 + 16$ results in an even sum.
Lesson 17: Divisibility Tests for 3 and 9

Exit Ticket

1. Is 26,341 divisible by 3? If it is, write the number as the product of 3 and another factor. If not, explain.

2. Is 8,397 divisible by 9? If it is, write the number as the product of 9 and another factor. If not, explain.

3. Explain why 186,426 is divisible by both 3 and 9.
Lesson 18: Least Common Multiple and Greatest Common Factor

Exit Ticket

1. Find the LCM and GCF of 12 and 15.

2. Write two numbers, neither of which is 8, whose GCF is 8.

3. Write two numbers, neither of which is 28, whose LCM is 28.

Rate each of the stations you visited today. Use this scale:

3—Easy—I’ve got it; I don’t need any help.
2—Medium—I need more practice, but I understand some of it.
1—Hard—I’m not getting this yet.

Complete the following chart:

<table>
<thead>
<tr>
<th>Station</th>
<th>Rating (3, 2, 1)</th>
<th>Comment to the Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station 1: Factors and GCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Station 2: Multiples and LCM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Station 3: Using Prime Factors for GCF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Station 4: Applying Factors to the Distributive Property</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 19: The Euclidean Algorithm as an Application of the Long Division Algorithm

Exit Ticket

Use Euclid’s algorithm to find the greatest common factor of 45 and 75.
Assessment Packet
1. Yasmine is having a birthday party with snacks and activities for her guests. At one table, five people are sharing three-quarters of a pizza. What equal-sized portion of the whole pizza will each of the five people receive?

   a. Use a model (e.g., picture, number line, or manipulative materials) to represent the quotient.

   b. Write a number sentence to represent the situation. Explain your reasoning.

   c. If three-quarters of the pizza provided 12 pieces to the table, how many pieces were in the pizza when it was full? Support your answer with models.
2. Yasmine needs to create invitations for the party. She has \( \frac{3}{4} \) of an hour to make the invitations. It takes her \( \frac{1}{12} \) of an hour to make each card. How many invitations can Yasmine create?

a. Use a number line to represent the quotient.

b. Draw a model to represent the quotient.

c. Compute the quotient without models. Show your work.
3. Yasmine is serving ice cream with the birthday cake at her party. She has purchased $19 \frac{1}{2}$ pints of ice cream. She will serve $\frac{3}{4}$ of a pint to each guest.
   
   a. How many guests can be served ice cream?

   b. Will there be any ice cream left? Justify your answer.

4. L.B. Johnson Middle School held a track and field event during the school year. Miguel took part in a four-person shot put team. Shot put is a track and field event where athletes throw (or “put”) a heavy sphere, called a “shot,” as far as possible. To determine a team score, the distances of all team members are added. The team with the greatest score wins first place. The current winning team’s final score at the shot put is 52.08 ft. Miguel’s teammates threw the shot put the following distances: 12.26 ft, 12.82 ft, and 13.75 ft. Exactly how many feet will Miguel need to throw the shot put in order to tie the current first-place score? Show your work.
5. The sand pit for the long jump has a width of 2.75 meters and a length of 9.54 meters. Just in case it rains, the principal wants to cover the sand pit with a piece of plastic the night before the event. How many square meters of plastic will the principal need to cover the sand pit?

6. The chess club is selling drinks during the track and field event. The club purchased water, juice boxes, and pouches of lemonade for the event. They spent $138.52 on juice boxes and $75.00 on lemonade. The club purchased three cases of water. Each case of water costs $6.80. What is the total cost of the drinks?
1. L.B. Johnson Middle School held a track and field event during the school year. The chess club sold various drink and snack items for the participants and the audience. Altogether, they sold 486 items that totaled $2,673.

   a. If the chess club sold each item for the same price, calculate the price of each item.

   b. Explain the value of each digit in your answer to 1(a) using place value terms.
2. The long-jump pit was recently rebuilt to make it level with the runway. Volunteers provided pieces of wood to frame the pit. Each piece of wood provided measures 6 feet, which is approximately 1.8287 meters.

\[
\begin{array}{c}
2.75 \text{ meters} \\
9.54 \text{ meters}
\end{array}
\]

a. Determine the amount of wood, in meters, needed to rebuild the frame.

b. How many boards did the volunteers supply? Round your calculations to the nearest hundredth, and then provide the whole number of boards supplied.
3. Andy runs 436.8 meters in 62.08 seconds.
   
   a. If Andy runs at a constant speed, how far does he run in one second? Give your answer to the nearest tenth of a second.

   b. Use place value, multiplication with powers of 10, or equivalent fractions to explain what is happening mathematically to the decimal points in the divisor and dividend before dividing.

   c. In the following expression, place a decimal point in the divisor and the dividend to create a new problem with the same answer as in 3(a). Then, explain how you know the answer will be the same.

\[
436.8 \div 62.08
\]
4. The PTA created a cross-country trail for the meet.
   
a. The PTA placed a trail marker in the ground every four hundred yards. Every nine hundred yards, the PTA set up a water station. What is the shortest distance a runner will have to run to see both a water station and trail marker at the same location?

   Answer: ___________________________ hundred yards

b. There are 1,760 yards in one mile. About how many miles will a runner have to run before seeing both a water station and trail marker at the same location? Calculate the answer to the nearest hundredth of a mile.

c. The PTA wants to cover the wet areas of the trail with wood chips. They find that one bag of wood chips covers a $3 \frac{1}{2}$-yard section of the trail. If there is a wet section of the trail that is approximately $50 \frac{1}{4}$ yards long, how many bags of wood chips are needed to cover the wet section of the trail?
5. The Art Club wants to paint a rectangle-shaped mural to celebrate the winners of the track and field meet. They design a checkerboard background for the mural where they will write the winners’ names. The rectangle measures 432 inches in length and 360 inches in width. Apply Euclid’s algorithm to determine the side length of the largest square they can use to fill the checkerboard pattern completely without overlap or gaps.