Yesterday, Ben’s bamboo plant grew 0.5 centimeter. Today it grew another 8/10 centimeter. How many centimeters did Ben’s bamboo plant grow in 2 days?

**Know**

Yesterday \(0.5 \text{cm} = \frac{5}{10}\)

Today \(\frac{8}{10} \text{cm} = 0.8\)

**Draw**

Total Plant Grew

0.5

\(\frac{8}{10}\)

0.8

**Solve**

\[0.5 + 0.8 = 1.3\]

or

\[\frac{5}{10} + \frac{8}{10} = \frac{13}{10} = 1 \frac{3}{10}\]

**Sentence**

Ben’s bamboo plant grew 1.3 cm or \(1 \frac{3}{10}\) cm in two days.
Ed bought 4 pieces of salmon weighing a total of 2 kilograms. One piece weighed \( \frac{4}{10} \) kg, and two of the pieces weighed \( \frac{5}{10} \) kg each. What was the weight of the fourth piece of salmon?

**What I Know**

- 4 pieces = 2 kg
- 1 piece = \( \frac{4}{10} \) kg
- 2 pieces = \( \frac{5}{10} \) kg each

**Picture**

- 2 kg

**Solve**

\[
\frac{4}{10} + \frac{5}{10} + \frac{5}{10} = \frac{14}{10} = 1\frac{4}{10} \\
2 - 1\frac{4}{10} = \frac{6}{10} \text{ kg} \\
1 \frac{10}{10} \quad \text{or} \\
\frac{5}{10} \text{ kg} + \frac{5}{10} \text{ kg} = 1 \text{ kg} \\
1\frac{4}{10} \text{ kg} + \frac{6}{10} \rightarrow 2 \text{ kg} \\
w = \frac{6}{10} \text{ kg}
\]

**Target Sentence**

The weight of the fourth piece of salmon is \( \frac{6}{10} \) kg.
4th Grade Module 6 Lesson 4

Ali is knitting a scarf that will be 2 meters long. So far, she has knitted \(1 \frac{2}{10}\) meters.

a. How many more meters does Ali need to knit? Write the answer as a fraction and as a decimal.

b. How many more centimeters does Ali need to knit?

<table>
<thead>
<tr>
<th>What I Know</th>
<th>Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1m = 100, cm)</td>
<td><img src="2m" alt="Diagram" /></td>
</tr>
<tr>
<td>(\frac{1}{10}m = 10, cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solve</th>
<th>Target Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. (2 - 1 \frac{2}{10} = \frac{8}{10} = 0.8, m) |</td>
<td></td>
</tr>
<tr>
<td>(\frac{1}{10})</td>
<td>a. Ali needs to knit (\frac{8}{10}, m) or 0.8, m more.</td>
</tr>
<tr>
<td>b. (\frac{8}{10}, m = 80, cm)</td>
<td>b. Ali needs to knit 80, cm more.</td>
</tr>
</tbody>
</table>
The perimeter of a square measures 0.48 m. What is the measure of each side length in centimeters?

What I Know

\[ P = l + w + l + w \]

\[ P = 0.48 \text{ m} \]

\[ 1 \text{ m} = 100 \text{ cm} \]

Picture

\[ 0.48 \text{ m} \]

\[ s \ ? \]

Solve

\[ 0.48 \text{ m} = 48 \text{ cm} \]

\[ 48 \text{ cm} \div 4 = 12 \text{ cm} \]

\[ s = 12 \text{ cm} \]

Target Sentence

Each side of the square has a length of 12 cm.
4th Grade Module 6 Lesson 6

The table shows the perimeter of four rectangles.

a. Which rectangle has the smallest perimeter?
b. The perimeter of Rectangle C is how many meters less than a kilometer?
c. Compare the perimeters of Rectangles B and D. Which rectangle has the greater perimeter? How much greater?

<table>
<thead>
<tr>
<th>Rectangle</th>
<th>Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>54 cm</td>
</tr>
<tr>
<td>B</td>
<td>(\frac{69}{100}) m</td>
</tr>
<tr>
<td>C</td>
<td>54 m</td>
</tr>
<tr>
<td>D</td>
<td>0.8 m</td>
</tr>
</tbody>
</table>

**What I Know**

\(1\ m = 100\ cm\)
\(1\ km = 1000\ m\)

**Picture**

**Target Sentence**

a. Rectangle A has the smallest perimeter.
b. The perimeter of rectangle C is 946 m less than a km.
c. Rectangle D has the greater perimeter. It is \(\frac{11}{100}\) m greater than rectangle B.

a.
\[
\text{Rectangle A } 54\ cm = \left(\frac{54}{100} m\right)
\]

\[
\text{B } \frac{69}{100}\ m
\]

\[
\text{C } 54\ m
\]

\[
\text{D } \frac{8}{100}\ x \frac{10}{10} = \frac{80}{100}\ m
\]

b. \(1000\ m - 54\ m = 946\ m\)

c. \(\frac{80}{100} - \frac{69}{100} = \frac{11}{100}\ m\)
Use pattern blocks to create at least 1 figure with at least 1 line of symmetry.
Jashawn had 5 hundred dollar bills and 6 ten dollar bills in his wallet. Alva had 58 ten dollar bills under her mattress. James had 556 one dollar bills in his piggy bank. They decide to combine their money to buy a computer. Express the total amount of money they have using the following bills:

a. Hundreds, tens, and ones  
b. Tens and ones  
c. Ones

<table>
<thead>
<tr>
<th>What I Know</th>
<th>Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5 \times 100$ bills = $500$</td>
<td></td>
</tr>
<tr>
<td>$6 \times 10$ bills = $60$</td>
<td></td>
</tr>
<tr>
<td>$58 \times 10$ bills = $580$</td>
<td></td>
</tr>
<tr>
<td>$556 \times 1$ bills = $556$</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solve</th>
<th>Target Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jashawn 560</td>
<td>a. 16 hundreds 9 tens 6 ones</td>
</tr>
<tr>
<td>Alva 580</td>
<td>b. 169 tens 6 ones</td>
</tr>
<tr>
<td>James $\frac{556}{\underline{1,696}}$</td>
<td>c. 1,696 ones</td>
</tr>
</tbody>
</table>
Kelly’s dog weighs 14 kilograms 24 grams. Mary’s dog weighs 14 kilograms 205 grams. Hae Jung’s dog weighs 4,720 grams.

a. Order the weight of the dogs in grams from least to greatest.

b. How much more does the heaviest dog weigh than the lightest dog?

<table>
<thead>
<tr>
<th>What I Know</th>
<th>Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 kg = 1000 grams</td>
<td>K 14 kg 24 g</td>
</tr>
<tr>
<td>14 kg = 14,000 grams</td>
<td>M 14 kg 205 g</td>
</tr>
<tr>
<td></td>
<td>HJ 4,720 g</td>
</tr>
</tbody>
</table>

**Solve**

<table>
<thead>
<tr>
<th></th>
<th>Target Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>4,720g &lt; 14,024g &lt; 14,205g</td>
</tr>
<tr>
<td>b.</td>
<td>Mary’s dog weighs 9,485g more than Hae Jung’s dog</td>
</tr>
</tbody>
</table>

a. $14,000 + 24g = 14,024g$

b. $14,205 - 4,720 = 9,485g$
In science class, Emily’s 1-liter beaker contains 0.3 liter of water. Ali’s beaker contains 0.8 liter of water, and Katie’s beaker contains 0.63 liter of water. Who can pour all of her water into Emily’s beaker without going over 1 liter, Ali or Katie?

What I Know

0.3 + 0.7 | Liter

Emily’s beaker can hold 0.7 L more without spilling over.

Picture

E 0.3L
A 0.8L
K 0.63L

Solve

0.8 > 0.7
0.63 < 0.7

Target Sentence

Katie can pour all of her water into Emily’s beaker without going over one liter because she has less than 0.7 L.
Grade 4 Module 6

Lesson 11:

While sewing, Kikanza cut 3 strips of colored fabric: a yellow 2.8-foot strip, an orange 2.08-foot strip, and a red 2.25-foot strip.

She put the shortest strip away in a drawer and placed the other 2 strips side by side on a table. Draw a tape diagram comparing the lengths of the strips on the table. Which measurement is longer?

\[ 2.8 \text{ ft. yellow} \]
\[ 2.08 \text{ ft. orange} \]
\[ 2.25 \text{ ft. red} \]

\[ 2.8 > 2.25 \]

The 2.8 ft, yellow piece of fabric is the longest.
Grade 4 Module 6

Lesson 12:

On Monday, $1 \frac{7}{8}$ inches of rain fell. On Tuesday, it rained $\frac{1}{4}$ inch. What was the total rainfall for the two days?

$1 \frac{7}{8}$ inches of rain on Monday
$\frac{1}{4}$ inch of rain on Tuesday

![Diagram]

$1 \frac{7}{8}$
$\frac{1}{4}$

\[ 1 \frac{7}{8} = 1 \frac{7}{8} \]
\[ + \frac{1}{4} = \frac{2}{8} \]
\[ \frac{9}{8} = 2 \frac{1}{8} \]

The total rainfall for the two days was $2 \frac{1}{8}$ inches.
Lesson 15:
At the end of the day, Cameron counted the money in his pockets. He counted 7 pennies, 2 dimes, and 2 quarters. Tell the amount of money, in cents, that was in Cameron’s pockets.

| Cameron has:          | 7 pennies
| 7 pennies             | 2 dimes
| 2 dimes               | 2 quarters

\[
\begin{array}{c}
50 \\
20 \\
+ \ 7 \\
\hline
77 \\
\end{array}
\]

The total amount of money in Cameron’s pockets was 77 cents.
### Show What You Know

1.) Write the fraction form and decimal form for the units below:

<table>
<thead>
<tr>
<th>unit</th>
<th>fraction</th>
<th>decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 tenths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 tenths</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.) Write the following in decimal form and as a mixed number:

- 4 ones 9 tenths
- 5 ones 3 tenths

3.) Write the following in decimal form:

\[
\frac{33}{10}
\]

4.) If you had the number 4.2 plotted on a number line, how much more is needed to get to 5?
### Show What You Know

1.) Draw a number bond with the tenths and hundredths as the two parts. Write the total as the equivalent decimal.

\[
\begin{align*}
\frac{48}{100} \text{ m} \\
\frac{25}{100} \text{ m}
\end{align*}
\]

2.) Write the equivalent decimal for the fractions below.

\[
\begin{align*}
\frac{9}{100} = \\
\frac{37}{100} =
\end{align*}
\]

3.) Write the equivalent fraction and decimal for each number below:

- 7 ones 21 hundredths =
- 5 ones 8 hundredths =

4.) What is the value of 6 in the number 358.62?
### Show What You Know

1.) Compare the values below using $>$, $<$, or $=$.

- $0.4 \underline{\quad} 0.49$
- $0.87 \underline{\quad} 0.9$
- $0.20 \underline{\quad} 0.2$

2.) Use the symbols $>$, $<$, or $=$ to compare the numbers below.

- $4.6 \underline{\quad} 4.06$
- $3.1 \underline{\quad} 3$ ones and $1$ hundredth
- $5.37 \underline{\quad} 53$ tenths and $7$ hundredths

3.) Arrange the following numbers in order from greatest to least using decimal form.

- $5.7, \frac{608}{100}, 6.16, 6 \frac{57}{100}, 6$ ones & $6$ tenths

4.) Write the decimal for the numbers written below.

- $6$ ones & $6$ tenths:
- $9$ ones & $3$ tenths:
### Show What You Know

1.) Find the sum. Write your answer as a decimal.
\[
\frac{3}{10} + \frac{74}{100}
\]

2.) Solve by rewriting the number sentence in fraction form. After solving, rewrite the complete number sentence in decimal form.

\[
8.28 + 5.8
\]

\[
7.5 + 0.97
\]

3.) Megan ran 6.78 km on Monday and 4.2 km on Tuesday. How many total km did she read on Monday and Tuesday?

4.) Give the total amount of $ in fraction and decimal form.

3 quarters, 2 dimes

2 quarters, 6 dimes, 26 pennies
### Show What You Know

1.) Write the fraction form and decimal form for the units below:

<table>
<thead>
<tr>
<th>unit</th>
<th>fraction</th>
<th>decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 tenths</td>
<td>$\frac{3}{10}$</td>
<td>0.3</td>
</tr>
<tr>
<td>7 tenths</td>
<td>$\frac{7}{10}$</td>
<td>0.7</td>
</tr>
</tbody>
</table>

2.) Write the following in decimal form and as a mixed number:

- 4 ones 9 tenths
  - $4 \frac{9}{10} = 4.9$
- 5 ones 3 tenths
  - $5 \frac{3}{10} = 5.3$

3.) Write the following in decimal form:

\[
\frac{33}{10} = 3.3
\]

4.) If you had the number 4.2 plotted on a number line, how much more is needed to get to 5?

\[
\frac{1}{4} + \frac{2}{8} = \frac{1}{4} + \frac{1}{4} = \frac{1}{2} = 0.5
\]

Self-check
**Show What You Know**

1.) Draw a number bond with the tenths and hundredths as the two parts. Write the total as the equivalent decimal.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{48}{100} )</td>
<td>0.48</td>
</tr>
<tr>
<td>( \frac{8}{100} )</td>
<td>0.08</td>
</tr>
<tr>
<td>( \frac{25}{100} )</td>
<td>0.25</td>
</tr>
<tr>
<td>( \frac{5}{100} )</td>
<td>0.05</td>
</tr>
</tbody>
</table>

2.) Write the equivalent decimal for the fractions below.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{9}{100} )</td>
<td>0.09</td>
</tr>
<tr>
<td>( \frac{37}{100} )</td>
<td>0.37</td>
</tr>
</tbody>
</table>

3.) Write the equivalent fraction and decimal for each number below:

- 7 ones 21 hundredths = \( \frac{21}{100} = 0.21 \)
- 5 ones 8 hundredths = \( \frac{8}{100} = 0.08 \)

4.) What is the value of 6 in the number 358.62?

- 6 tenths = 0.6
# Show What You Know

1.) Compare the values below using $>,$ $<,$ or $=.$

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40</td>
<td>$\leq$</td>
</tr>
<tr>
<td>0.87</td>
<td>$\leq$</td>
</tr>
<tr>
<td>0.20</td>
<td>$=$</td>
</tr>
</tbody>
</table>

2.) Use the symbols $>,$ $<,$ or $=$ to compare the numbers below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6</td>
<td>$&gt;$</td>
</tr>
<tr>
<td>3.1</td>
<td>$&gt;$</td>
</tr>
<tr>
<td>5.37</td>
<td>$=$</td>
</tr>
</tbody>
</table>

3.) Arrange the following numbers in order from greatest to least using decimal form.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.7, $\frac{608}{100}$, 6.16, $\frac{57}{100}$, 6 ones &amp; 6 tenths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.08</td>
<td>0.57</td>
<td>0.60</td>
</tr>
<tr>
<td>5.7, 6.08, 0.57, 0.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.) Write the decimal for the numbers written below.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6 ones &amp; 6 tenths: 0.60</td>
</tr>
<tr>
<td>9 ones &amp; 3 tenths: 0.93</td>
</tr>
</tbody>
</table>

### Greatest to Least:

0.60, 0.57, 0.08, 5.7
### Show What You Know

1.) Find the sum. Write your answer as a decimal.

\[
\frac{3}{10} + \frac{74}{100} = \frac{30}{100} + \frac{74}{100} = \frac{104}{100} = 1.04
\]

2.) Solve by rewriting the number sentence in fraction form. After solving, rewrite the complete number sentence in decimal form.

\[
8.28 + 5.8 = 5 \frac{80}{100} + \frac{8}{10} = \frac{13}{100} = 14.08
\]

\[
7.5 + 0.97 = \frac{75}{10} + \frac{97}{100} = \frac{172}{100} = 8.47
\]

3.) Megan ran 6.78 km on Monday and 4.2 km on Tuesday. How many total km did she read on Monday and Tuesday?

\[
6.78 + 4.2 = \frac{678}{100} + \frac{420}{100} = \frac{1098}{100} = 10.98
\]

Megan ran 10.98 km both days.

4.) Give the total amount of $ in fraction and decimal form.

3 quarters, 2 dimes

\[
\frac{75}{100} + \frac{20}{100} = \frac{95}{100} = 0.95
\]

2 quarters, 6 dimes, 26 pennies

\[
\frac{200}{100} + \frac{60}{100} + \frac{26}{100} = \frac{36}{100} = 1.36
\]
End-of-Module Assessment

Name: ___________________________ Date: ________________

1. Write the fraction form and the decimal form for the units below:

<table>
<thead>
<tr>
<th>unit form</th>
<th>fraction form</th>
<th>decimal form</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 tenths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 tenths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 tenths</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Write the following in decimal form and as a mixed number:

<table>
<thead>
<tr>
<th>decimal form</th>
<th>mixed number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ones 7 tenths</td>
<td></td>
</tr>
<tr>
<td>6 ones 2 tenths</td>
<td></td>
</tr>
<tr>
<td>8 ones 1 tenth</td>
<td></td>
</tr>
</tbody>
</table>

3. Write the following in decimal form:

\[
\frac{43}{10} =
\]

\[
\frac{76}{10} =
\]

4. If you had 6.3 plotted on a number line, how much more is needed to get to 7?
5. Draw a number bond with the tenths and hundredths as the two parts. Write the total as the equivalent decimal.

\[
\frac{68}{100}
\]

\[
\frac{35}{100}
\]

6. Write the equivalent decimal for the fractions below.

\[
\frac{6}{100} =
\]

\[
\frac{49}{100} =
\]

7. Write the equivalent fraction and decimal for each number below:

9 ones 48 hundredths =

4 ones 7 hundredths =

8. What is the value of 3 in the number 587.39?

What is the value of 2 in the number 356.12?

9. Compare the values below using >, <, or =.

0.5 ____ 0.59 

0.67 ____ 0.7 

0.4 ____ 0.40
10. Use the symbols $\gt$, $\lt$, or $=$ to compare the numbers below.

5.6 _____ 5.06

4.1 _____ 4 ones and 1 hundreth

8.49 _____ 84 tenths and 9 hundreths

11. Arrange the following numbers in order from greatest to least using decimal form.

$3.7, \frac{308}{100}, 4.14, \frac{47}{100}$, 4 ones & 4 tenths

12. Write the decimal for the numbers written below.

2 ones & 2 tenths: _________________________

8 ones & 4 tenths: _________________________

13. Find the sum and write your answer as a decimal.

\[
\frac{2}{10} + \frac{84}{100} = \]

\[
\frac{4}{10} + \frac{51}{100} = \]
14. Solve by rewriting the number sentence in **fraction form**. After solving, rewrite the complete number sentence in **decimal form**.

\[ 5.37 + 8.9 = \]

\[ 4.8 + 0.76 = \]

15. Jim and Joe ran a relay race. Jim had a time of 9.8 seconds. Joe had a time of 10.32 seconds. Together, how long did it take them to complete the race? Record your answer in decimal form.

16. Give the total amount of $ in **fraction and decimal form**.

6 quarters, 4 dimes

3 quarters, 4 dimes, 58 pennies
SHOW WHAT YOU KNOW

1.) Complete the following conversions.
   a.) 6 ft = _______ inches
   b.) 5 yards 8 feet = _______ feet
   c.) 8 pounds 4 ounces = ________ ounces
   d.) 5 quarts = _______ cups

2.) A school day is 6 hours 25 minutes. How many minutes are students in school for 3 days?

3.) Use RDW to solve the following problem.
    Steve has a grapefruit that weighs 2 pounds. If he cut it into 4 equal pieces, how many ounces would each piece weigh?

4.) Caitlin throws a softball 75 feet and Tracey throws a softball 93 feet. How many yards did they throw the softball altogether?
SHOW WHAT YOU KNOW

1.) Find the following sum or difference. Show your work.
   a.) 8 gal 3 qt + 5 gal 5 qt = _____ gal _____ qt
   b.) 6 yds 2 ft – 3 yds 1 ft = _____ yd _____ ft

2.) Determine the following sums and differences. Show your work.
   a.) 9 lb 3 oz - 6 lb 4 oz = _____ lb _____ oz
   b.) 7 lb 4 oz + 4 lb 13 oz = _____ lb _____ oz

3.) Find the following sum or difference. Show your work.
   a.) 3 hr 45 min + 8 hr 30 min = _____ hr _____ min
   b.) 6 hr 15 min – 3 hr 45 min = _____ hr _____ min

4.) Joey spent 2 hours at soccer, 1 hour 30 minutes at the library, and 55 min doing chores. How much time does it take Joey to complete all of those activities?
**SHOW WHAT YOU KNOW**

1.) Andy spent 1 hour 45 minutes less than Tim practicing guitar. Tim practiced 15 minutes less than Jason, who spent 3 hours 30 minutes. How long did Andy spend practicing?

2.) Solve.
   
   a.) \( \frac{1}{12} \text{ ft} = \underline{\text{______}} \text{ inches} \)
   
   b.) \( \frac{3}{4} \text{ ft} = \underline{\text{______}} \text{ inches} \)
   
   c.) \( 2 \frac{2}{3} \text{ yd} = \underline{\text{______}} \text{ feet} \)
   
   d.) \( 3 \frac{1}{4} \text{ gal} = \underline{\text{______}} \text{ quarts} \)

3.) Draw a tape diagram that shows \( 3 \frac{1}{4} \text{ gal} = 13 \text{ qts} \)

4.) It took Julie 2 hour 30 minutes to complete a half marathon. Ron took twice as long because he walked some of the way. How long did it take Ron to finish the half marathon?
SHOW WHAT YOU KNOW

1.) Complete the following conversions.
   a.) $6 \text{ ft} = \underline{72} \text{ inches}$
       $6 \times 12 = \underline{72}$
   b.) $5 \text{ yards} \ 8 \text{ feet} = \underline{68} \text{ feet}$
       $\frac{5 \times 3 + 8}{12} = \frac{17}{12} = \frac{68}{48}$
   c.) $8 \text{ pounds} \ 4 \text{ ounces} = \underline{132} \text{ ounces}$
       $8 \times 16 = 128$
       $128 + 4 = \underline{132}$
   d.) $5 \text{ quarts} = \underline{20} \text{ cups}$
       $5 \times 4 = \underline{20}$

2.) A school day is 6 hours 25 minutes. How many minutes are students in school for 3 days?
   - Day 1: 6 hr 25 min
   - Day 2: 6 hr 25 min
   - Day 3: 6 hr 25 min
   $6 \times 75 = 450$
   $450 \times 3 = 1350$
   $1350 + 450 = 1800$
   Students are in school for 1155 minutes in 3 days.

3.) Use RDW to solve the following problem.
   Steve has a grapefruit that weighs 2 pounds. If he cut it into 4 equal pieces, how many ounces would each piece weigh?
   \[
   \frac{1}{4} \times 2 \text{ pounds} = \frac{1}{2} \text{ pound} = \frac{8}{2} \text{ oz} = \frac{8}{4} \text{ oz}
   \]
   When a 2 pound grapefruit is cut into 4 pieces, each piece would weigh 8 ounces.

4.) Caitlin throws a softball 75 feet and Tracey throws a softball 93 feet. How many yards did they throw the softball altogether?
   \[
   C = 75 \text{ ft} = \frac{25}{2} \text{ yd} \quad (75 \div 3)
   T = 93 \text{ ft} = \frac{31}{3} \text{ yd} \quad (93 \div 3)
   \]
   $25 + 31 = 56$
   Caitlin and Tracey throw the softball 56 yds altogether.
SHOW WHAT YOU KNOW

1.) Find the following sum or difference. Show your work.
   a.) 8 gal 3 qt + 5 gal 5 qt = \[\text{15 gal 0 qt}\]
   \[
   \begin{array}{ccc}
   8 \text{ gal} & 3 \text{ qt} \\
   + & 5 \text{ gal} & 5 \text{ qt} \\
   \hline
   \text{13 gal} & 8 \text{ qt} \\
   - & 2 \text{ gal} & 0 \text{ qt} \\
   \hline
   \text{11 gal 8 qt} \\
   \end{array}
   \]
   b.) 6 yds 2 ft – 3 yds 1 ft = \[3 \text{ yd 1 ft}\]
   \[
   \begin{array}{ccc}
   6 \text{ yds} & 2 \text{ ft} \\
   - & 3 \text{ yds} & 1 \text{ ft} \\
   \hline
   3 \text{ yds} & 1 \text{ ft} \\
   \end{array}
   \]

2.) Determine the following sums and differences. Show your work.
   a.) 9 lb 3 oz - 6 lb 4 oz = \[2 \text{ lb 15 oz}\]
   \[
   \begin{array}{ccc}
   9 \text{ lb} & 3 \text{ oz} \\
   - & 6 \text{ lb} & 4 \text{ oz} \\
   \hline
   2 \text{ lb} & 15 \text{ oz} \\
   \end{array}
   \]
   b.) 7 lb 4 oz + 4 lb 13 oz = \[12 \text{ lb 1 oz}\]
   \[
   \begin{array}{ccc}
   7 \text{ lb} & 4 \text{ oz} \\
   + & 4 \text{ lb} & 13 \text{ oz} \\
   \hline
   11 \text{ lb} & 17 \text{ oz} \\
   \end{array}
   \]

3.) Find the following sum or difference. Show your work.
   a.) 3 hr 45 min + 8 hr 30 min = \[12 \text{ hr 15 min}\]
   \[
   \begin{array}{ccc}
   3 \text{ hr} & 45 \text{ min} \\
   + & 8 \text{ hr} & 30 \text{ min} \\
   \hline
   11 \text{ hr} & 75 \text{ min} \\
   \end{array}
   \]
   b.) 6 hr 15 min - 3 hr 45 min = \[2 \text{ hr 30 min}\]
   \[
   \begin{array}{ccc}
   6 \text{ hr} & 15 \text{ min} \\
   - & 3 \text{ hr} & 45 \text{ min} \\
   \hline
   2 \text{ hr} & 30 \text{ min} \\
   \end{array}
   \]

4.) Joey spent 2 hours at soccer, 1 hour 30 minutes at the library, and 55 min doing chores. How much time does it take Joey to complete all of those activities?
   \[
   \begin{array}{ccc}
   2 \text{ hr} \\
   \hline
   1 \text{ hr} & 30 \text{ min} \\
   55 \text{ min} \\
   \hline
   3 \text{ hr} & 85 \text{ min} \\
   60 \text{ min} \\
   \hline
   4 \text{ hr} & 25 \text{ min} \\
   \end{array}
   \]

It takes Joey 4 hr 25 min to complete all the activities.
SHOW WHAT YOU KNOW

1.) Andy spent 1 hour 45 minutes less than Tim practicing guitar. Tim practiced 15 minutes less than Jason, who spent 3 hours 30 minutes. How long did Andy spend practicing?

A = \(3\text{ hr } 15\text{ min} - 1\text{ hr } 45\text{ min} = \frac{1}{12}\text{ hr} 30\text{ min}\)

T = 3\text{ hr } 30\text{ min} - 15\text{ min} = 3\text{ hr } 15\text{ min}

J = 3\text{ hr } 30\text{ min}

Andy practiced the guitar for 1\text{ hr } 30\text{ min}.

2.) Solve.

a.) \(\frac{6}{12} = \frac{1}{2}\text{ ft} = \underline{3}\text{ inches}\)

b.) \(\frac{9}{12} = \frac{3}{4}\text{ ft} = \underline{9}\text{ inches}\)

c.) \(\frac{2}{3}\text{ yd} = 8\text{ feet}\)

1\text{ yd} = 3\text{ ft} \quad 3\times2 = 6\text{ ft}
\frac{3}{8}\text{ ft} = \frac{3}{8}\text{ yd} = 2\text{ ft}

d.) \(3\frac{1}{4}\text{ gal} = \underline{13}\text{ quarts}\)

1\text{ gal} = 4\text{ qt} \quad 3\times4 = 12\text{ qt}
\frac{1}{4}\text{ gal} = 1\text{ qt}

3.) Draw a tape diagram that shows \(3\frac{1}{4}\text{ gal} = 13\text{ qts}\)

4.) It took Julie 2 hour 30 minutes to complete a half marathon. Ron took twice as long because he walked some of the way. How long did it take Ron to finish the half marathon?

\(2\text{ hr } 30\text{ min} + 3\text{ hr } 30\text{ min} = \frac{1}{4}\text{ hr } 60\text{ min}\)

It took Ron 5 hours to finish the half marathon.
1.) Complete the following conversions.

a.) 5 ft = ________ inches

b.) 4 yards 6 feet = ________ feet

c.) 7 pounds 3 ounces = ________ ounces

d.) 6 quarts = ________ cups

2.) A school day is 6 hours 25 minutes. How many minutes are students in school for 5 days?
3.) Use RDW to solve the following problem.
   Peter has a grapefruit that weighs 3 pounds. If he cut it into 6 equal pieces, how many ounces would each piece weigh?

4.) Julia throws a softball 68 feet and Grace throws a softball 74 feet. How many yards did they throw the softball altogether?
5.) Find the following sum or difference. Show your work.
   a.) 4 gal 2 qt + 5 gal 3 qt = _____ gal _____ qt
   b.) 7 yds 4 ft – 3 yds 3 ft = _____ yd _____ ft

6.) Determine the following sums and differences. Show your work.
   a.) 9 lb 5 oz - 5 lb 7 oz = _____ lb _____ oz
   b.) 8 lb 6 oz + 2 lb 14 oz = _____ lb _____ oz

7.) Find the following sum or difference. Show your work.
   a.) 4 hr 45 min + 9 hr 30 min = _____ hr _____ min
   b.) 7 hr 15 min – 4 hr 45 min = _____ hr _____ min

8.) Jimmy spent 2 hours at baseball, 1 hour 15 minutes at the library, and 55 min doing chores. How much time does it take Jimmy to complete all of those activities?
9.) Carlos spent 1 hour 10 minutes less than Tom practicing piano. Tom practiced 45 minutes less than Jackson, who spent 2 hours 30 minutes. How long did Carlos spend practicing piano?

10.) Solve

a.) \( \frac{1}{12} = \frac{1}{4} \text{ft} = \underline{\quad} \text{inches} \)

b.) \( \frac{3}{12} = \frac{3}{4} \text{ft} = \underline{\quad} \text{inches} \)

c.) \( 4\frac{2}{3} \text{yd} = \underline{\quad} \text{feet} \)

d.) \( 5\frac{3}{4} \text{gal} = \underline{\quad} \text{quarts} \)
11.) Draw a tape diagram that shows:

\[ \frac{3}{4} \text{ gal} = 19 \text{ qts} \]

12.) It took Julie 2 hours 5 minutes to complete a half marathon. Ron took twice as long because he walked some of the way. How long did it take Ron to finish the half marathon?