Worksheet 1  Understanding Tenths

Example

You can express fractions in tenths as decimals.

\[
\frac{10}{10} \text{ is equal to } 1.
\]

10 tenths = 1 one

Count the shaded parts.
Fill in the blanks.

Example

One part is shaded.
As a fraction, we say \( \frac{1}{10} \) out of 10 parts is shaded.
We write it as \( \frac{1}{10} \).
1. __________ parts are shaded.

As a fraction, we say ________ out of ________ parts are shaded.

We write it as ________.

**Fill in the blanks.**

**Example**

The shaded parts show \(\frac{4}{10}\).

We write it as 0.4.

We read it as **four tenths**.

2. __________ parts are shaded.

The shaded parts show ________.

We write it as ________.

We read it as ________________.

3. __________ parts are shaded.

The shaded parts show ________.

We write it as ________.

We read it as ________________.
4. The shaded parts show \[ \frac{3}{10} \].
   We write it as \[ \frac{3}{10} \].
   We read it as \[ \frac{3}{10} \].

Write each mixed number as a decimal.
Complete the following.

Example

\[ 1 \frac{3}{10} = \frac{13}{10} \text{ one + } \frac{3}{10} \text{ tenths} \]
\[ = 1.3 \]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

5. \[ 1 \frac{2}{10} = \frac{12}{10} \text{ one + } \frac{2}{10} \text{ tenths} \]
\[ = \frac{12}{10} \]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Fill in the blanks.

Example

\[
\frac{3}{10} = \underline{1} \text{ one } + \underline{3} \text{ tenths}
\]

\[
= 1.3
\]

6. \( \frac{23}{10} = \underline{2} \text{ ones } + \underline{3} \text{ tenths}
\]

\[
= 2.3
\]

7. \( \frac{11}{10} = \underline{1} \text{ one } + \underline{1} \text{ tenth}
\]

\[
= 1.1
\]

Write each improper fraction as a decimal.

Fill in the blanks.

Example

\[
\frac{10}{10} + \frac{3}{10} = \frac{13}{10}
\]

\[
= 13 \text{ tenths}
\]

\[
\frac{13 \text{ tenths}}{} = \underline{1} \text{ one } + \underline{3} \text{ tenths}
\]

\[
= 1.3
\]
8. 

\[ \begin{array}{c|c|c|c|c|c|c|c|c|c} \hline \text{Ones} & \text{Tenths} \\
\hline \hline \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } \\
\end{array} \]

\[ \begin{array}{c|c|c|c|c|c|c|c|c|c} \hline \text{Ones} & \text{Tenths} \\
\hline \hline \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } & \text{ } \\
\end{array} \]

\[ \text{_____ + _____ = _____} \]
\[ \text{_____ = _____ one + _____ tenths} \]

Complete.

Example

\[ \frac{14}{10} = \frac{10}{10} + \frac{4}{10} \]
\[ = 1 \text{ one + } 4 \text{ tenths} \]
\[ = 1.4 \]

9. \[ \frac{12}{10} = \boxed{\text{_____ + _____}} \]
\[ = \boxed{\text{_____ one + _____ tenths}} \]

10. \[ \frac{26}{10} = \boxed{\text{_____ + _____}} \]
\[ = \boxed{\text{_____ ones + _____ tenths}} \]

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Write the place value.

Example

\[ 0.5 = \frac{5}{10} \text{ tenths} \]

\[ = \frac{5}{10} \]

The digit \(5\) is in the tenths place.

The value of the digit is \(0.5\) or \(\frac{5}{10}\).

11. \(0.9 = \) _____ tenths

\[ = \] _____

The digit _____ is in the tenths place.

The value of the digit is _____ or _____.

12. \(0.7 = \) _____ tenths

\[ = \] _____

The digit _____ is in the tenths place.

The value of the digit is _____ or _____.

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Write the place values.

Example

\[3.5 = \underline{3} \text{ ones } \underline{5} \text{ tenths}\]
\[= \underline{3} + \underline{\frac{5}{10}}\]

The digit \underline{5} is in the tenths place.
The value of the digit is \underline{0.5} or \underline{\frac{5}{10}}.

The digit \underline{3} is in the ones place.
The value of the digit is \underline{3}.

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>\underline{3}</td>
<td>\underline{5}</td>
</tr>
</tbody>
</table>

13. \[2.9 = \underline{2} \text{ ones } \underline{9} \text{ tenths}\]
\[= \underline{2} + \underline{\text{_______}}\]

The digit \underline{9} is in the tenths place.
The value of the digit is \underline{_______} or \underline{_______}.

The digit \underline{2} is in the ones place.
The value of the digit is \underline{2}.

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>\underline{2}</td>
<td>\underline{9}</td>
</tr>
</tbody>
</table>
Write the place values.

Example

12.5

\[= \underline{1} \text{ ten } \underline{2} \text{ ones } \underline{5} \text{ tenths.}\]

\[= 10 + 2 + \frac{5}{10}\]

The digit \(\underline{5}\) is in the tenths place.
The value of the digit is \(0.5\) or \(\frac{5}{10}\).

The digit \(\underline{2}\) is in the ones place.
The value of the digit is \(2\).

The digit \(\underline{1}\) is in the tens place.
The value of the digit is \(10\).

10 + 2 + $\frac{5}{10}$ is called the expanded form of a decimal number.
14. 35.9

= _____ tens _____ ones _____ tenths.

= _____ + _____ + _____

The digit _____ is in the tenths place.

The value of the digit is _____ or _____.

The digit _____ is in the ones place.

The value of the digit is _____.

The digit _____ is in the tens place.

The value of the digit is _____.

The digit 3 is in the tens place.

The value of the digit is 30. 

The digit 5 is in the ones place.

The value of the digit is 5.

The digit 9 is in the tenths place.

The value of the digit is 0.9.
Fill in the blanks.

15. \[ 63.2 = \underline{\hspace{2cm}} \text{tens} \underline{\hspace{2cm}} \text{ones} \underline{\hspace{2cm}} \text{tenths} \]
   \[ = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} \]
   The digit \underline{\hspace{2cm}} is in the tenths place.
   The digit 3 stands for \underline{\hspace{2cm}} ones.
   The value of the digit 6 is \underline{\hspace{2cm}}.

16. \[ 19.4 = \underline{\hspace{2cm}} \text{ten} \underline{\hspace{2cm}} \text{ones} \underline{\hspace{2cm}} \text{tenths} \]
   \[ = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} \]
   The digit \underline{\hspace{2cm}} is in the tenths place.
   The digit 9 stands for \underline{\hspace{2cm}} ones.
   The value of the digit 1 is \underline{\hspace{2cm}}.

17. \[ 52.7 = \underline{\hspace{2cm}} \text{tens} \underline{\hspace{2cm}} \text{ones} \underline{\hspace{2cm}} \text{tenths} \]
   \[ = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} \]
   The digit \underline{\hspace{2cm}} is in the tenths place.
   The digit 2 stands for \underline{\hspace{2cm}} ones.
   The value of the digit 5 is \underline{\hspace{2cm}}.
Worksheet 2  Understanding Hundredths

Count the shaded parts.

Example

One part is shaded.
As a fraction, we say \( \frac{1}{100} \) parts is shaded.
We write it as \( \frac{1}{100} \).

1.

\[ \text{_______ parts are shaded.} \]
As a fraction, we say \( \text{_______} \) out of \( \text{_______} \) parts are shaded.
We write it as \( \text{_______} \).

2.

\[ \text{_______ parts are shaded.} \]
As a fraction, we say \( \text{_______} \) out of \( \text{_______} \) parts are shaded.
We write it as \( \text{_______} \).
Fill in the blanks.

Example

The shaded parts show \( \frac{2}{100} \).

We write it as \( 0.02 \).

We read it as \( 2 \text{ hundredths} \).

3.

The shaded parts show \( \frac{\text{___}}{\text{___}} \).

We write it as \( \text{______} \).

We read it as \( \text{______} \).

4.

The shaded parts show \( \frac{\text{___}}{\text{___}} \).

We write it as \( \text{______} \).

We read it as \( \text{______} \).
Write each of these as a decimal.

Example

5 hundredths = \(0.05\)

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

5. 2 hundredths = __________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. 8 hundredths = __________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Write each of these as a decimal.

Example

3 tenths 5 hundredths = 0.35

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

7. 6 tenths 2 hundredths = ________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

8. 5 tenths 8 hundredths = ________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>
Write each of these as a decimal.

**Example**

1 one and 3 tenths 5 hundredths = 1.35

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

9. 2 ones and 3 tenths 8 hundredths = __________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. 3 ones and 1 tenth 5 hundredths = __________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Express tenths as hundredths.

Example

4 tenths = 40 hundredths

11.

6 tenths = ________ hundredths

12.

9 tenths = ________ hundredths

Fill in the blanks.

13. 3 tenths = ________ hundredths

14. 5 tenths = ________ hundredths
Express hundredths as tenths and hundredths.

Example:

18 hundredths = _____ tenth _____ hundredths

15.

26 hundredths = _______ tenths _________ hundredths

16.

32 hundredths = _______ tenths _________ hundredths

Fill in the blanks.

17. 12 hundredths = _______ tenth _________ hundredths

18. 63 hundredths = _______ tenths _________ hundredths
Write each fraction as a decimal.

Example

\[
\frac{15}{100} = 0.15
\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>●●●●●●</td>
</tr>
</tbody>
</table>

\[
\frac{15}{100} = 15 \text{ hundredths}
\]

15 hundredths = 10 hundredths + 5 hundredths

= 1 tenth + 5 hundredths

= 0.1 + 0.05

= 0.15
19. \( \frac{28}{100} = \) ________

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>![Hundredths Diagram]</td>
</tr>
</tbody>
</table>

\( \frac{28}{100} = \) ________ hundredths

______ hundredths = ________ hundredths + ________ hundredths

= ________ tenths + ________ hundredths

= ________ + ________

Fill in the blanks.

20. \( \frac{52}{100} = \) ________ hundredths + ________ hundredths

= ________ tenths + ________ hundredths

= ________ + ________

= ________
Write each mixed number as a decimal.

Example

\[ 1 \frac{16}{100} = 1.16 \]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ 1 \frac{16}{100} = \text{1 one} + \text{1 tenth} + \text{6 hundredths} \]

\[ = 1 + 0.1 + 0.06 \]

\[ = 1.16 \]

21. \[ 1 \frac{13}{100} = \text{________} \]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ 1 \frac{13}{100} = \text{________ one} + \text{________ tenth} + \text{________ hundredths} \]

\[ = \text{________} + \text{________} + \text{________} \]

\[ = \text{________} \]
22. \[ \frac{26}{100} = \] 

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>

\[ \frac{26}{100} = \] ____ ones + _____ tenths + _____ hundredths

= _____ + _____ + _____

= _____

Example

\[ \frac{211}{100} = \] 

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>.</td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>

\[ \frac{211}{100} = \] 2 ones + 2 tenths + 1 hundredth

= \[ 2 + 0.2 + 0.01 \]

= 2.21

23. \[ \frac{41}{100} = \] 

\[ \frac{41}{100} = \] ____ ones + _____ tenths + _____ hundredths

= _____ + _____ + _____

= _____

24. \[ \frac{27}{100} = \] 

\[ \frac{27}{100} = \] ____ ones + _____ tenths + _____ hundredths

= _____ + _____ + _____

= ____
Write each improper fraction as a decimal.

Example

\[
\frac{125}{100} = 1.25
\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

\[
\frac{125}{100} = \underline{100} \text{ hundredths} + \underline{25} \text{ hundredths}
\]

\[
= \underline{1} \text{ one} + \underline{25} \text{ hundredths}
\]

\[
= \underline{1} \text{ one} + \underline{2} \text{ tenths} + \underline{5} \text{ hundredths}
\]

\[
= \underline{1} + \underline{0.2} + \underline{0.05}
\]

\[
= 1.25
\]

25. \[
\frac{142}{100} = \underline{_______} \text{ hundredths} + \underline{_______} \text{ hundredths}
\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

\[
\frac{142}{100} = \underline{_______} \text{ hundredths} + \underline{_______} \text{ hundredths}
\]

\[
= \underline{_______} \text{ one} + \underline{_______} \text{ hundredths}
\]

\[
= \underline{_______} \text{ one} + \underline{_______} \text{ tenths} + \underline{_______} \text{ hundredths}
\]

\[
= \underline{_______} + \underline{_______} + \underline{_______}
\]

\[
= \underline{_______}
\]
Write the place values.

Example

\[0.15 = \frac{1}{10} \text{ tenth} + \frac{5}{100} \text{ hundredths}\]

\[= \frac{1}{10} + \frac{5}{100}\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

The digit \[\_1\] is in the tenths place.
The value of the digit is \[0.1\] or \[\frac{1}{10}\].

The digit \[\_5\] is in the hundredths place.
The value of the digit is \[0.05\] or \[\frac{5}{100}\].

\[0.05 = \frac{5}{100}\]

We read 0.05 as five hundredths. Its value is 5 hundredths.
26. $0.24 = \underline{2} \text{ tenths} + \underline{4} \text{ hundredths}$

\[= \underline{2} + \underline{4}\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><img src="0.24" alt="tenths" /></td>
</tr>
</tbody>
</table>

The digit \(\underline{2}\) is in the tenths place.
The value of the digit is \(\underline{2}\) or \(\underline{0.2}\).
The digit \(\underline{4}\) is in the hundredths place.
The value of the digit is \(\underline{4}\) or \(\underline{0.04}\).

27. $0.54 = \underline{5} \text{ tenths} + \underline{4} \text{ hundredths}$

\[= \underline{5} + \underline{4}\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><img src="0.54" alt="tenths" /></td>
<td><img src="0.54" alt="hundredths" /></td>
</tr>
</tbody>
</table>

The digit \(\underline{5}\) is in the tenths place.
The value of the digit is \(\underline{5}\) or \(\underline{0.5}\).
The digit \(\underline{4}\) is in the hundredths place.
The value of the digit is \(\underline{4}\) or \(\underline{0.04}\).
Write the place values.

Example

3.52

\[
\begin{align*}
&= 3 \text{ ones } 5 \text{ tenths } 2 \text{ hundredths} \\
&= \frac{3}{1} + \frac{5}{10} + \frac{2}{100}
\end{align*}
\]

<table>
<thead>
<tr>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>●●●</td>
<td>●●●●●</td>
<td>●●</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

The digit \(2\) is in the hundredths place.

The digit \(2\) stands for \(\frac{2}{100}\) hundredths or \(0.02\).

The value of the digit is \(0.02\) or \(\frac{2}{100}\).

The digit \(5\) is in the tenths place.

The digit \(5\) stands for \(\frac{5}{10}\) tenths or \(0.5\).

The value of the digit is \(0.5\) or \(\frac{5}{10}\).

The digit \(3\) is in the ones place.

The digit \(3\) stands for \(3\) ones.

The value of the digit is \(3\).