Mathematics

## Converting to Decimals

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## Connect

We can represent decimal values and equivalent percentages using a place value table.

| Tens | Ones | Tenths | Hundredths | Thousandths |  | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 4 |  |  | $=$ |  |
|  | 0 | 4 | 3 |  | $=$ |  |
|  | 0 | 4 | 6 | 3 | $=$ |  |

## Independent task

1. Represent each of the marked values as a percentage and the equivalent decimal, using a place value chart.

2. Write the decimal equivalent to
a) $30 \%$
b) $34 \%$
c) $34.4 \%$
d) $30.4 \%$
e) $3 \%$

## Explore

How many ways can you complete this place value chart, using all four digit cards?

| Ones | Tenths | Hundredths | Thousandths |  | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  | $=$ |  |
|  |  |  |  | $=$ |  |
|  |  |  |  | = |  |
| - |  |  |  | = |  |
|  |  |  |  | = |  |
|  |  |  |  | $=$ |  |

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Answers

## Try this

We can represent decimal values and equivalent percentages using a place value table.

| Tens | Ones | Tenths | Hundredths | Thousandths |  | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 4 |  |  | $=$ | $40 \%$ |
|  | 0 | 4 | 3 |  | $=$ | $43 \%$ |
|  | 0 | 4 | 6 | 3 | $=$ | $46.3 \%$ |

## Independent task

1. Represent each of the marked values as a percentage and the equivalent decimal, using a place value chart.

2. Write the decimal equivalent to
a) $30 \%$
b) $34 \%$
c) $34.4 \%$
d) $30.4 \%$
e) $3 \%$
0.3
0.34
0.344
0.304
0.03

## Explore

How many ways can you complete this place value chart, using all four digit cards?

| Ones | Tenths | Hundredths | Thousandths |  | Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0. | 0 | 2 | 2 | $=$ | 2.2\% |
| 0. | 2 | 0 | 2 | = | 20.2\% |
| 0. | 2 | 2 | 0 | = | 22\% |
| 2. | 0 | 0 | 2 | = | 200.2\% |
| 2. | 0 | 2 | 0 | = | 202\% |
| 2. | 2 | 0 | 0 | = | 220\% |



