**Convert Percents to Fractions**

**To convert a Percent to a Fraction follow these steps:**

* Step 1: Write down the percent divided by 100.
* Step 2: **If** the percent is **not** a whole number, then multiply both top and bottom by 10 for every number after the decimal point. (For example, if there is one number after the decimal, then use 10, if there are two then use 100, etc.)
* Step 3: [Simplify](https://www.mathsisfun.com/simplifying-fractions.html) (or reduce) the fraction

**Example: Express 11% as a fraction**

Step 1: Write down:

|  |
| --- |
| 11 |
| 100 |

Step 2: The percent is a whole number, go straight to step 3.

Step 3: The fraction cannot be simplified further.

**Answer = 11/100**

**Example: Express 75% as a fraction**

Step 1: Write down:

|  |
| --- |
| 75 |
| 100 |

Step 2: The percent is a whole number, go straight to step 3.

Step 3: [Simplify the fraction](https://www.mathsisfun.com/simplifying-fractions.html) (this took me two steps, you may be able to do it one!):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ÷5 |  | ÷ 5 |  |
| https://www.mathsisfun.com/images/left-up-over-arrow.gif  https://www.mathsisfun.com/images/left-up-over-arrow.gif | | | | |
| 75 | = | 15 | = | 3 |
|  |  |  |
| 100 | 20 | 4 |
| https://www.mathsisfun.com/images/left-under-over-arrow.gif  https://www.mathsisfun.com/images/left-under-over-arrow.gif | | | | |
|  | ÷5 |  | ÷ 5 |  |

**Answer = 3/4**

*Note: 75/100 is called a* ***decimal fraction*** *and 3/4 is called a* ***common fraction*** *!*

**Example: Express 62.5% as a fraction**

Step 1: Write down:

|  |
| --- |
| 62.5 |
| 100 |

Step 2: Multiply both top and bottom by 10 (because there is 1 digit after the decimal place)

|  |  |  |
| --- | --- | --- |
|  | × 10 |  |
| https://www.mathsisfun.com/images/left-up-over-arrow.gif | | |
| 62.5 | = | 625 |
|  |  |
| 100 | 1,000 |
| https://www.mathsisfun.com/images/left-under-over-arrow.gif | | |
|  | × 10 |  |

*(See how this neatly makes the top a whole number?)*

Step 3: Simplify the fraction (this took me two steps, you may be able to do it one!) :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ÷ 25 |  | ÷ 5 |  |
| https://www.mathsisfun.com/images/left-up-over-arrow.gif  https://www.mathsisfun.com/images/left-up-over-arrow.gif | | | | |
| 625 | = | 25 | = | 5 |
|  |  |  |
| 1,000 | 40 | 8 |
| https://www.mathsisfun.com/images/left-under-over-arrow.gif  https://www.mathsisfun.com/images/left-under-over-arrow.gif | | | | |
|  | ÷ 25 |  | ÷ 5 |  |

**Answer = 5/8**

**Example: Express 150% as a fraction**

Step 1: Write down:

|  |
| --- |
| 150 |
| 100 |

Step 2: The percent is a whole number, go straight to step 3.

Step 3: Simplify the fraction (I did it one step):

|  |  |  |
| --- | --- | --- |
|  | ÷ 50 |  |
| https://www.mathsisfun.com/images/left-up-over-arrow.gif | | |
| 150 | = | 3 |
|  |  |
| 100 | 2 |
| https://www.mathsisfun.com/images/left-under-over-arrow.gif | | |
|  | ÷ 50 |  |

**Answer = 3/2**

(which also equals **1½**, see [Mixed Fractions](https://www.mathsisfun.com/mixed-fractions.html))