

**5202-02 Multiply and divide by 10 and 100 (pg 1)**Free resources from Mathsblog in association with [www.mathsgogogo.co.uk](http://www.mathsgogogo.co.uk) © Mathsgogogo

1. Use a calculator to complete this table by multiplying and dividing by 10 and 100.

| <b><math>N \div 100</math></b> | <b><math>N \div 10</math></b> | <b>N</b> | <b><math>N \times 10</math></b> | <b><math>N \times 100</math></b> |
|--------------------------------|-------------------------------|----------|---------------------------------|----------------------------------|
|                                |                               | 12       |                                 |                                  |
|                                |                               | 4.6      |                                 |                                  |
|                                |                               | 150      |                                 |                                  |
|                                |                               | 34.8     |                                 |                                  |
|                                |                               | 17       |                                 |                                  |
|                                |                               | 0.7      |                                 |                                  |
|                                |                               | 0.23     |                                 |                                  |
|                                |                               | 9.34     |                                 |                                  |
|                                |                               | 27.4     |                                 |                                  |

2. Describe what happens when:

- a) a number is multiplied by 10
- b) a number is multiplied by 100
- c) a number is divided by 10
- d) a number is divided by 100

3. In this table fill in the missing numbers.

| <b><math>N \div 100</math></b> | <b><math>N \div 10</math></b> | <b>N</b> | <b><math>N \times 10</math></b> | <b><math>N \times 100</math></b> |
|--------------------------------|-------------------------------|----------|---------------------------------|----------------------------------|
|                                |                               |          | 150                             |                                  |
|                                |                               |          |                                 | 2300                             |
|                                | 8                             |          |                                 |                                  |
| 0.09                           |                               |          |                                 |                                  |
|                                |                               |          | 47.6                            |                                  |
|                                |                               |          |                                 | 3600                             |
|                                | 0.78                          |          |                                 |                                  |
| 2.34                           |                               |          |                                 |                                  |
|                                |                               |          | 9                               |                                  |

|    |        |       |             |      |       |
|----|--------|-------|-------------|------|-------|
| 1. | 0.12   | 1.2   | <b>12</b>   | 120  | 1200  |
|    | 0.046  | 0.46  | <b>4.6</b>  | 46   | 460   |
|    | 1.5    | 15    | <b>150</b>  | 1500 | 15000 |
|    | 0.348  | 3.48  | <b>34.8</b> | 348  | 3480  |
|    | 0.17   | 1.7   | <b>17</b>   | 170  | 1700  |
|    | 0.007  | 0.07  | <b>0.7</b>  | 7    | 70    |
|    | 0.0023 | 0.023 | <b>0.23</b> | 2.3  | 23    |
|    | 0.0934 | 0.934 | <b>9.34</b> | 93.4 | 934   |
|    | 0.274  | 2.74  | <b>27.4</b> | 274  | 2740  |

2. When a number is multiplied by 10 it moves one place to the left.  
When a number is multiplied by 100 it moves two places to the left.  
When a number is divided by 10 it moves one place to the right.  
When a number is divided by 100 it moves two places to the right.

|    |             |             |      |             |             |
|----|-------------|-------------|------|-------------|-------------|
| 3. | 0.15        | 1.5         | 15   | <b>150</b>  | 1500        |
|    | 0.23        | 2.3         | 23   | 230         | <b>2300</b> |
|    | 0.8         | <b>8</b>    | 80   | 800         | 8000        |
|    | <b>0.09</b> | 0.9         | 9    | 90          | 900         |
|    | 0.0476      | 0.476       | 4.76 | <b>47.6</b> | 476         |
|    | 0.36        | 3.6         | 36   | 360         | <b>3600</b> |
|    | 0.078       | <b>0.78</b> | 7.8  | 78          | 780         |
|    | <b>2.34</b> | 23.4        | 234  | 2340        | 23400       |
|    | 0.009       | 0.09        | 0.9  | <b>9</b>    | 90          |