

## 4 Rules (Decimals) (non-calculator)

### Starter

1. **(Review of Y7 material)** Without a calculator find the value of:

(a)  $15.89 + 7.4$  (b)  $62.4 - 16.83$

2. **(Review of Y7 material)** Without a calculator find the value of:

(a)  $16.4 \times 5.7$  (b)  $4.60 \times 3.8$  (c)  $7.95 \div 0.6$

**N.B.** If you've forgotten how to multiply decimals, click [here](#).

**N.B.** If you've forgotten how to divide by a decimal, click [here](#).

**N.B.** The symbol  $\equiv$  means "equivalent to" or "is the same as".

The abbreviation N.B. is short for "nota bene" which is Latin for "note well".

### Notes

#### **Addition and subtraction of decimals**

Set the numbers out so that the decimal points are above each other in a line.

#### **Multiplying decimals**

1. Ignore the decimal points and do the (long) multiplication.
2. Count how many digits after the decimal point there are in the question (do not count zeros at the end of the number) — there will be the same number of digits after the decimal point in the answer.

#### **Dividing by a decimal**

1. Multiply both numbers by 10, 100, 1000 etc until the number that is dividing (the **divisor**) is a whole number.
2. Carry out normal (long) division, making sure that the decimal point in the number being divided does not change position.

**E.g. 1** Find: (a)  $64.8 \div 0.4$  (b)  $8.67 \times 4.9$  (c)  $10.395 \div 4.5$

**Video:** [Multiplying decimals](#)  
**Video:** [Dividing by a decimal](#)

[Solutions to Starter and E.g.s](#)

### Exercise

p65 Ex 4.2 Qu 1ace, 2ace, 5, 6ace, 7ace, 8

### Summary

Addition/subtraction of decimals — mark sure the decimal points are directly above each other.

#### Multiplying decimals

1. Ignore the decimal points and do the multiplication.
2. Count how many digits after the decimal point there are in the question (do not count zeros at the end of the number) — there will be the same number of digits after the decimal point in the answer.

#### Dividing by a decimal

1. Multiply both numbers by 10, 100, ... until the dividing number is a whole number.
2. Carry out normal division, making sure that the decimal point in the number being divided does not change position.

[Textbook answers \(only available during a lockdown\)](#)