

Decimal Fractions

Lecture sheet – 6

Multiplication by decimal

- Multiply 30×1.2

$$\begin{array}{r}
 30 \\
 \times 1.2 \\
 \hline
 60 \\
 300 \\
 \hline
 360
 \end{array}$$

Multiply Numbers without thinking the decimal point



$$\begin{array}{r}
 30 \\
 \times 1.2 \\
 \hline
 60 \\
 300 \\
 \hline
 36.0
 \end{array}$$

Put a decimal point at the same place in the multiplier

1.Exercise:

- 1) 30×1.2
- 2) 4×1.3
- 3) 35×2.4
- 4) 50×0.7
- 5) 8×0.6
- 6) 25×0.4

- Let's discuss how to calculate the multiplication by decimal.

* 0.2×0.16

$$\begin{array}{r}
 0.2 \\
 \times 0.16 \\
 \hline
 012 \\
 020 \\
 \hline
 0000 \\
 0032
 \end{array}$$

Multiply numbers without thinking the decimal point

$$\begin{array}{r}
 0.2 \\
 \times 0.16 \\
 \hline
 012 \\
 020 \\
 \hline
 0000 \\
 0.032
 \end{array}$$

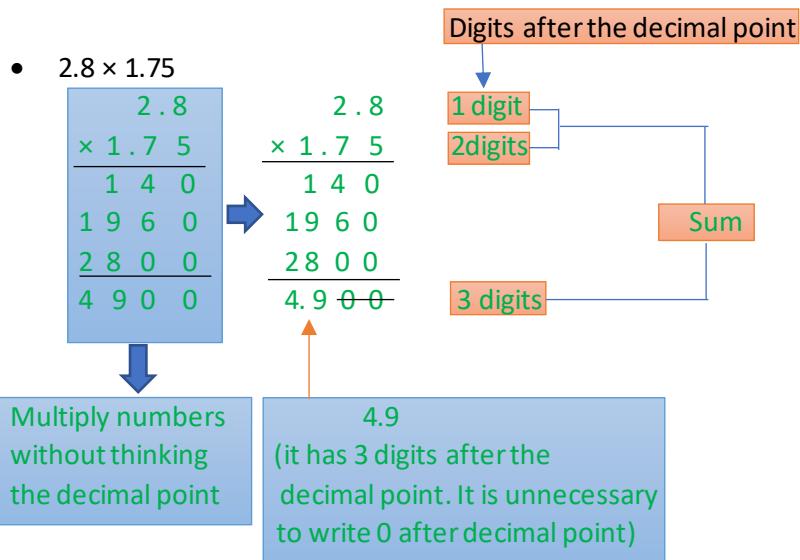
Digits after the decimal point

1 digit
2 digits

Sum

3 digits

0.032 (it has 3 digits after the decimal point)



2. Exercise:

Multiply vertically:

1. 3.2×1.24
2. 4.37×6.8
3. 0.35×2.9
4. 4.1×0.73
5. 3.68×0.15
6. 0.74×2.5
7. 0.32×0.4
8. 0.6×0.13
9. 0.25×0.8
10. 29×4.73
11. 18×0.65
12. 26×0.415
13. 16×3.14

Solution

1.

- 1) 36 2) 5.2 3) 84 4) 35 5) 4.8 6) 10

2.

- 1) 3.968 2) 29.716 3) 1.015 4) 2.993 5) 0.552 6) 1.85 7) 0.128 8) 0.078 9) 0.2
10) 137.17 11) 11.7 12) 10.79 13) 50.24