

4.1 Multiplying Decimals by Whole Numbers

2

Whole number
- No decimal
- No fraction

Numbers that are multiplied
are called factors

The answer is called
the product

- The number of decimal
places in the product
is the same as the
number of decimal
places in the decimal
factor

$$2 \times 0.04$$

$$\begin{array}{r} 0.04 \\ \times 2 \\ \hline 0.08 \end{array} \quad \begin{array}{r} 0.05 \\ \times 2 \\ \hline 0.10 \\ 0.1 \end{array}$$

$$\begin{array}{r} 3.04 \\ \times 3 \\ \hline 9.12 \end{array}$$

$$5 \times 3.2 \times 2$$

↖ ↗

$$5 \times 2 \times 3.2$$

In multiplication we have
Commutative property

order

$$10 \times 3.2 \leftarrow$$

$$32$$

$$\begin{aligned} &4 \times (2 \times 3.6) && \text{Use Associative} \\ &(4 \times 2) \times 3.6 && \text{Groups} \\ &8 \times 3.6 \\ &\begin{array}{r} 8 \\ \times 3.6 \\ \hline 48 \\ 240 \\ \hline 28.8 \end{array} && \begin{array}{r} 3.6 \\ \times 8 \\ \hline 28.8 \end{array} \end{aligned}$$

P 171-172
2-32 even