

Multiplying and dividing by 10, 100 and 1000

Multiplying a number by 10, 100 or 1000 results in the digits moving one, two or three places to the left respectively. For example,

$$28 \times 10 = 280$$

$$28 \times 100 = 2800$$

$$28 \times 1000 = 28000$$

$$34.56 \times 10 = 345.6$$

$$34.56 \times 100 = 3456$$

$$34.56 \times 1000 = 34560$$

Similarly, dividing a number by 10, 100 or 1000 results in the digits moving one, two or three places to the right respectively. For example,

$$28 \div 10 = 2.8$$

$$28 \div 100 = 0.28$$

$$28 \div 1000 = 0.028$$

$$34.56 \div 10 = 3.456$$

$$34.56 \div 100 = 0.3456$$

$$34.56 \div 1000 = 0.03456$$

EXERCISE 1.1B



- 1 Multiply the following numbers by 10.
 a) 63 b) 4.6 c) 0.84 d) 0.065 e) 1.07
- 2 Multiply the following numbers by 100.
 a) 45 b) 7.2 c) 0.96 d) 0.0485 e) 6.033
- 3 Find the value of the following.
 a) 46×1000
 b) 6.8×1000
 c) 3.8×1000
 d) 0.0084×1000
 e) 0.7×1000
- 4 Divide the following numbers by 10.
 a) 680 b) 72 c) 8.9 d) 0.64 e) 0.054
- 5 Divide the following numbers by 100.
 a) 3500 b) 655 c) 5.62 d) 0.8 e) 0.034
- 6 Find the value of the following.
 a) $6.4 \div 1000$
 b) $46 \div 1000$
 c) $950 \div 1000$
 d) $0.0845 \div 1000$
 e) $4 \div 1000$