

## 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)  $46 \times 1000$   
 b)  $6.8 \times 1000$   
 c)  $3.8 \times 1000$   
 d)  $0.0084 \times 1000$   
 e)  $0.7 \times 1000$
- 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)  $4 \div 1000$