› Learner's Book answers

Unit 1 The number system

Getting started

1 **a** 9 ones   **b** 9 hundredths

    c 9 tenths

2 **a** two hundred and five thousand, four hundred and eight point nine   205 408.9

    b five hundred and seventy thousand and thirty six point zero one   570 036.01

3 **a** 0.1   **b** 5.55

4 10

5 **a** 6 m   **b** 37 cm

    c 12 m   **d** 11 cm

6 **a** 99.5   **b** 10.4

Exercise 1.1

1 **a** 7 hundred   **b** 7 thousandths

    c 7 tenths   **d** 7 hundredths

2 2.046

3 Odd one out is 12.34. All the others are equivalent to 1.234.

4 **a** two point one three nine   2.139

    b negative nine hundred and nine point nine zero nine   −909.909

    c twenty-five point four three one   25.431

    d negative three point four eight one   −3.481

5 0.8 or $\frac{8}{10}$ and 0.004 or $\frac{4}{1000}$

6 **a** 0.14   **b** 0.019

7 **a** 7200   **b** 85   **c** 42.8

    d 6.7   **e** 0.151   **f** 0.55

8 **a** C   **b** D   **c** E

9 5

Exercise 1.2

1 4   8   3   7

2 $15

3 4.5   5.05   4.55   5.35

4 4.5   7.8   2.4   9.1

5 7.51   7.49   7.53

6 A   False, 3.04 is 3.0 when rounded to the nearest tenth.

    B   True

    C   False, 6.95 is 7.0 when rounded to the nearest tenth.

7 55.6 litres   12.2 metres   35.5 kilograms

8 0.5

9 7.97 is 8 when rounded to the nearest whole number.

    7.97 is 8.0 when rounded to the nearest tenth. The 7 in the hundredths place increases the tenths by one so 7.9 becomes 8.0. If the number is rounded to the nearest tenth, there must be a digit in the tenths place, even if it is zero.
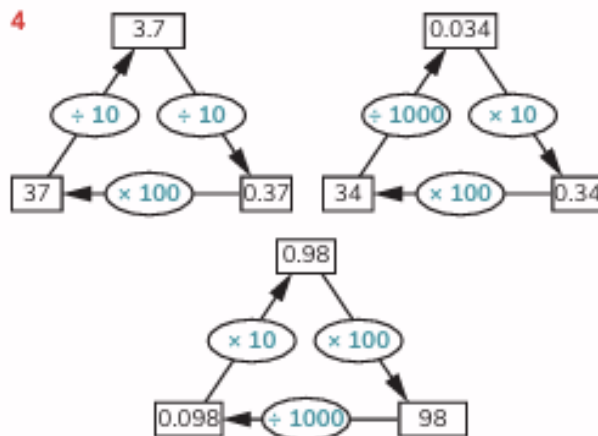
>Workbook answers

Unit 1 The number system

Exercise 1.1

Focus

1 $\frac{6}{10} + \frac{7}{100}$

2 5 thousandths

3 A: 5607 tenths + 9 thousandths, C: 56 + 0.79

4

5 $91.969 = 90 + 1 + 0.9 + 0.06 + 0.009$

6 0.645

Practice

7 5 tenths, 6 thousandths, 7 ones

8 a 560   b 880   c 412.8
   d 0.67   e 1.91   f 0.63

9 D

10
in	out
1.5	1500
0.937	937
16.24	16 240
0.49	490
0.07	70

11 −24.976

Challenge

12 To multiply by 100, you move each digit two places to the left. If you multiply a whole number by 100, this has the effect of adding two zeros but this does not work for all numbers, for example, 1.5×100 does not equal 1.500.

13 0.007

14 Anton: 4.5, Ben: 0.045, Kasinda: 45 and Anya: 0.45

15 Leila has made the number 51.111. If she had put all her counters in the tens column, she would have made the number 90.

$90 > 51.111$

Exercise 1.2

Focus

1

2 10.35, 9.55, 10.05, 9.5

3 a 7.8   b 8

4
Number	Number rounded to the nearest tenth	Number rounded to the nearest whole number
3.78	3.8	4
4.45	4.5	4
3.55	3.6	4
4.04	4.0	4

Practice

5 100.45

6 19.42

7 1.45 and 3.45

8 10.49

Challenge

9 3.34

10 JULY

11 16.51 rounded to the nearest whole number is 17.

17.49 rounded to the nearest whole number is 17.

Both answers are 17.

16.51 rounded to the nearest tenth is 16.5.

17.49 rounded to the nearest tenth is 17.5.

The difference between 17.5 and 16.5 is 1 so Stefan is correct.

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