

KS3 – Decimals

Section A – Decimal Place Value

Q1 (4 marks)

State the value of the specified digit.

a) The digit 7 in 4.72

b) The digit 6 in 15.063

c) The digit 8 in 0.008

d) The digit 5 in 35.214

Q2 (4 marks)

State the digit in the:

a) tenths place in 8.472

b) hundredths place in 13.609

c) thousandths place in 5.2847

d) ones place in 27.356

Q3 (3 marks)

Write each as a decimal.

a) 6 ones and 4 tenths

b) 3 ones, 7 tenths and 2 hundredths

c) 8 tenths, 5 hundredths and 6 thousandths

Q4 (3 marks)

Write each number in expanded form.

a) 7.46

b) 12.305

c) 0.728

Q5 (3 marks)

Insert $<$, $>$ or $=$.

a) 4.7 ____ 4.70

b) 3.086 ____ 3.68

c) 0.905 ____ 0.95

Q6 (2 marks)

Put these numbers in ascending order.

5.4, 5.04, 5.404, 5.44, 5.004

Challenge

Q7 (1 mark)

A number has three decimal places. Its tenths digit is 4, its hundredths digit is twice its tenths digit, and its thousandths digit is 3 less than its hundredths digit. The ones digit is 6.

Write the number.

Section B – Decimal Operations

Q8 (3 marks)

Work out.

a) $4.7 + 3.8$

b) $12.46 + 7.9$

c) $0.638 + 2.47$

Q9 (3 marks)

Work out.

a) $9.5 - 4.2$

b) $15.03 - 6.78$

c) $10 - 3.486$

Q10 (3 marks)

Work out.

a) 3.6×4

b) 2.45×6

c) 0.84×7

Q11 (3 marks)

Work out.

a) $48.6 \div 6$

b) $7.35 \div 5$

c) $12.8 \div 4$

Q12 (3 marks)

Work out.

a) 4.6×0.3

b) 2.75×1.2

c) 0.48×0.25

Q13 (3 marks)

Work out.

a) $7.2 \div 0.6$

b) $4.95 \div 0.5$

c) $8.64 \div 1.2$

Q14 (2 marks)

A bottle contains 1.5 litres of juice. Mia drinks 0.375 litres and Sam drinks 0.48 litres.
How much juice is left?

Q15 (2 marks)

A shop sells 6 notebooks for £2.75 each.
How much do the 6 notebooks cost altogether?

Challenge

Q16 (2 marks)

A runner completes three laps in 48.65 seconds, 47.8 seconds and 49.375 seconds.
Work out the runner's total time for the three laps.

Q17 (2 marks)

A 7.5 kg bag of rice is shared equally into 12 smaller bags.
How much rice is in each smaller bag?

Section C – Rounding Decimals

Q18 (3 marks)

Round each number to the nearest whole number.

a) 6.4

b) 12.7

c) 38.5

Q19 (3 marks)

Round each number to 1 decimal place.

a) 4.26

b) 7.85

c) 12.94

Q20 (3 marks)

Round each number to 2 decimal places.

a) 5.376

b) 8.904

c) 13.995

Q21 (3 marks)

Round each number to the number of decimal places stated.

a) 6.487 to 1 decimal place

b) 0.7358 to 2 decimal places

c) 14.20649 to 3 decimal places

Q22 (2 marks)

A length is measured as 8.746 metres.

a) Round the length to 1 decimal place.

b) Round the length to 2 decimal places.

Challenge

Q23 (2 marks)

A number rounds to 7.4 when rounded to 1 decimal place.

Write down the smallest possible number with two decimal places.

Write down the largest possible number with two decimal places.

Q24 (1 mark)

A calculator displays 12.4968.

Tom rounds this to 12.50 correct to 2 decimal places. Explain why Tom is correct.

Total: ____ / 60

Percentage: ____%