

Name

# Key to Five

Unit 5: Decimals

## The PiXL Ladder to Success



- Exam style question
- Calculating with decimals
- Estimating
- Multiply/dividing decimals
- Add/ subtract decimals
- Rounding to significant figures
- Rounding to decimal places

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**Section A**

**Question 1**

Round the following to 2 significant figures

a) 23.76

b) 0.006354

c) 1092

d) 65.43

**(Total 4 marks)**

**Question 2**

Use approximations to estimate the solution to the following

(a)

$$\frac{80.456}{8.1}$$

..... (2)

(b)

$$305 - 47.890$$

..... (2)

**(Total 4 marks)**

**Question 3**

Estimate the solution to

$$0.4995 \times 20$$

..... (Total 2 marks)

**Question 4**

Pencils cost 13p each

(a) Clare has 31 people in her class. She needs to buy a pencil for each pupil. Estimate how much this will cost.

.....(2)

(b) How many can be bought with £4.00?

.....(2)

(c) Clare says that if she buys two pencils for every pupil in her class she will still get change from £5.00. Is she correct? Use an estimate to explain your answer.

.....  
 .....  
 .....  
 .....(2)

(Total 6 marks)

**Question 5**

A bottle of juice serves 18 people. Alice and Edward are each inviting 100 people to a party

Estimate how many bottles of juice they should buy for each person to have two servings.

.....(3)

**(Total 3 marks)**

**Question 6**

A bag of sugar weighs 892grams and serves 45 people. Estimate how many grams there are per serving.

.....(1)

**(Total 1 mark)**

**Question 7**

Work out an estimate for  $3.9 \times 102$

**(2 marks)**

**Question 8****NO CALC**

Using the information that

$$72 \times 235 = 16920$$

Write down the value of

- (a)  $720 \times 235$
- (b)  $7.2 \times 235$
- (c)  $16920 \div 7.2$

**Question 9**

Use the information that

$$46 \times 158 = 7268$$

Find

- (a)  $4.6 \times 158$
- (b)  $4.6 \times 1.58$
- (c)  $72.68 \div 46$

**Question 10**

Use the information that

$$322 \times 48 = 15\,456$$

to find the value of

(a)  $3.22 \times 4.8$

.....  
**(1)**

(b)  $0.322 \times 0.48$

.....  
**(1)**

(c)  $15\,456 \div 4.8$

.....  
**(1)****(Total 3 marks)**

**Section B**

**Question 11**

Work out  $1.83 \times 47$

.....  
**(Total 3 marks)**

**Question 12.**

Felix want to work out how much it costs him to use his tumble dryer.  
The tumble dryer uses 1.9 units of electricity to dry one load of washing.  
Felix dries four loads of washing each week.  
He pays 12.8p for every unit of electricity he uses.

Work out the weekly cost, in pence, of using the tumble dryer.

.....  
**(Total 4 marks)**

**Question 13.**

Work out  $86 \times 2.65$

.....  
**(Total 3 marks)**

**Question 14.**

One kilogram of butter costs £6.80  
Javed buys 200 g of butter.

Work out how much Javed pays.

£.....

**(Total 3 marks)**

**Question 15**

Steve wants to put a hedge along one side of his garden.

He needs to buy 27 plants for the hedge.

Each plant costs £5.54.

Steve has £150 to spend on plants for the hedge.

Does Steve have enough money to buy all the plants he needs?

.....  
**(Total 4 marks)**



**Question 16**

Work out  $564 \times 768$

**Question 19**

Work out  $286 \times 43$

.....  
**(Total 3 marks)**

## Section C

### Question 20

A litre of petrol costs £1.14. Nevis wants to buy 25 litres.

He pays with a £50 note. How much change does he receive?

(4)

### Question 21

Calculate

a)  $0.6 \times 12$

b)  $4.2 \times 3.6$

(3)

### Question 22

In supermarket, loaves of bread can be sliced at the bakery counter.

A loaf of bread is 32cm long.

It can be cut into slices 9mm thick.

How many complete 1.2cm slices can the loaf be cut into?

(3)

### Question 23

Given  $\frac{28.609}{4.27} = 6.7$

work out

a)  $\frac{2.8609}{0.427}$

b)  $67 \times 4.27$

c)  $0.67 \times 42$

d)  $\frac{286.09}{42.7}$

(4)