

**AcumenTeach**

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11+ MATHEMATICS

Decimals Worksheet

Free practice · 10 questions · Answers and worked solutions included

Name	
Date	
Score	/ 10

Instructions

1. Choose one answer, A, B, C or D, for each question.
2. Show your working on the lines under each question.
3. No calculator. Take your time: this is practice, not a timed test.
4. Check your answers with the worked solutions at the back.

Question 1Calculate: $4.7 + 3.85$

A 7.55**B** 8.45**C** 8.55**D** 8.62**Question 2**Calculate: $12.3 - 4.76$

A 7.54**B** 7.64**C** 8.46**D** 8.54**Question 3**Calculate: 0.6×0.4

A 0.024**B** 0.24**C** 2.4**D** 0.1

Question 4

Calculate: $3.6 \div 0.3$

A 0.12**B** 1.2**C** 12**D** 120**Question 5**

Round 7.465 to 1 decimal place.

A 7.4**B** 7.46**C** 7.5**D** 7.47**Question 6**

Which is the smallest?

A 0.307**B** 0.37**C** 0.3007**D** 0.073

Question 7

Write 0.35 as a fraction in its simplest form.

A 35/10**B** 7/20**C** 3/5**D** 7/50**Question 8**

Calculate: 2.4×15

A 3.6**B** 30**C** 36**D** 360**Question 9**

What is the value of the digit 4 in 23.746?

A 4**B** 0.4**C** 0.04**D** 0.004

Question 10

Three items cost £2.35, £4.80 and £0.95. How much change is there from £10?

A £1.80**B** £1.90**C** £2.10**D** £2.90

Answers and Worked Solutions

For parents and tutors. Award 1 mark for each correct answer.

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	A	3	B	4	C	5	C
6	D	7	B	8	C	9	C	10	B

Diagram colour key

- Given in the question
 Worked out
 Groups and matching parts
 Final answer

Question 1

Core

Calculate: $4.7 + 3.85$

A 7.55 B 8.45 C 8.55 D 8.62

Step	What to do	Working
1	Line up the decimal points	$4.70 + 3.85$
2	Add	8.55
✓	Answer	C = 8.55

Watch out: Not lining up the decimal points (8.62).

Question 2

Stretch

Calculate: $12.3 - 4.76$

A 7.54 B 7.64 C 8.46 D 8.54

Step	What to do	Working
1	Write 12.3 as 12.30	$12.30 - 4.76$
2	Subtract in columns	7.54
✓	Answer	A = 7.54

Watch out: Subtracting the smaller digit from the larger in each column (8.46).

Question 3**Core**Calculate: 0.6×0.4

A 0.024 B 0.24 C 2.4 D 0.1

Step	What to do	Working
1	Multiply as whole numbers	$6 \times 4 = 24$
2	Count decimal places	$1 + 1 = 2$ places
3	Place the point	0.24
✓	Answer	B = 0.24

Watch out: Putting only one decimal place (2.4).**Question 4****Challenge**Calculate: $3.6 \div 0.3$

A 0.12 B 1.2 C 12 D 120

Step	What to do	Working
1	Multiply both numbers by 10	$36 \div 3$
2	Divide	12
✓	Answer	C = 12

Watch out: Expecting a smaller answer (1.2). Dividing by a number less than 1 makes it bigger.**Question 5****Core**

Round 7.465 to 1 decimal place.

A 7.4 B 7.46 C 7.5 D 7.47

Step	What to do	Working
1	Look at the 2nd decimal digit	6
2	6 is 5 or more, so round up	$7.4 \rightarrow 7.5$
✓	Answer	C = 7.5

Watch out: Rounding to 2 decimal places instead (7.47).

Question 6**Stretch***Which is the smallest?*

A 0.307 B 0.37 C 0.3007 D 0.073

Step	What to do	Working
1	Give each 4 decimal places	0.3070, 0.3700, 0.3007, 0.0730
2	Compare the tenths	only 0.0730 has 0 tenths
3	Pick the smallest	0.073
✓	Answer	D = 0.073

	Units	Tenths	Hundredths	Thousandths	Ten-thousandths
0.307	0	3	0	7	0
0.37	0	3	7	0	0
0.3007	0	3	0	0	7
0.073	0	0	7	3	0

Compare the tenths first: only 0.073 has 0 tenths

Smallest: 0.073**Watch out:** Choosing 0.3007 because it has the most digits.**Question 7****Stretch***Write 0.35 as a fraction in its simplest form.*

A 35/10 B 7/20 C 3/5 D 7/50

Step	What to do	Working
1	Write as hundredths	$0.35 = 35/100$
2	Divide top and bottom by 5	$7/20$
✓	Answer	B = 7/20

Watch out: Writing 35/10, which is 3.5.

Question 8**Stretch**Calculate: 2.4×15

A 3.6 B 30 C 36 D 360

Step	What to do	Working
1	Split 15 into 10 + 5	$2.4 \times 10 = 24, 2.4 \times 5 = 12$
2	Add	$24 + 12 = 36$
✓	Answer	C = 36

Watch out: Misplacing the decimal point (3.6 or 360).**Question 9****Core**

What is the value of the digit 4 in 23.746?

A 4 B 0.4 C 0.04 D 0.004

Step	What to do	Working
1	Name the columns after the point	tenths 7, hundredths 4, thousandths 6
2	The 4 is in the hundredths	4 hundredths = 0.04
✓	Answer	C = 0.04

Watch out: Mixing up tenths and hundredths (0.4).**Question 10****Stretch**

Three items cost £2.35, £4.80 and £0.95. How much change is there from £10?

A £1.80 B £1.90 C £2.10 D £2.90

Step	What to do	Working
1	Add the items	$£2.35 + £4.80 + £0.95 = £8.10$
2	Subtract from £10	$£10.00 - £8.10 = £1.90$
✓	Answer	B = £1.90

Watch out: A carrying slip with the pence.

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