

Decimals and Rounding

ANSWERS

No calculator | 30 minutes | Total marks: 30

Name _____ Class _____

- 1 (a) Write these numbers in order of size. Start with the smallest.

0.35 0.305 0.5 0.053

Answer 0.053, 0.305, 0.35, 0.5 (1) [1 mark]

- (b) Write these numbers in order of size. Start with the smallest.

-1.5 0.2 -0.75 -2

Answer -2, -1.5, -0.75, 0.2 (1) [1 mark]

- 2 Work out

- (a) $4.7 + 12.85$

Answer 17.55 (1) [1 mark]

- (b) $20 - 6.38$

correct column method (1)

Answer 13.62 (1) [2 marks]

- (c) 0.036×1000

Answer 36 (1) [1 mark]

- (d) $47.2 \div 100$

Answer 0.472 (1) [1 mark]

3

Work out

(a) 3.26×7

$$326 \times 7 = 2282 \text{ (1)}$$

Answer 22.82 (1)

[2 marks]

(b) $25.6 \div 8$

$$256 \div 8 = 32 \text{ (1)}$$

Answer 3.2 (1)

[2 marks]

(c) 4.5×16

$$45 \times 16 = 720 \text{ (1)}$$

Answer 72 (1)

[2 marks]

4

(a) Round 3847 to the nearest hundred.

Answer 3800 (1)

[1 mark]

(b) Round 6.2748 to 2 decimal places.

Answer 6.27 (1)

[1 mark]

(c) Round 0.05063 to 2 significant figures.

Answer 0.051 (1)

[1 mark]

(d) Round 48 329 to 1 significant figure.

Answer 50 000 (1)

[1 mark]

5

(a) Use approximations to estimate the value of 289×4.1

$$300 \times 4 \text{ (1)}$$

Answer 1200 (1)

[2 marks]

(b) Use approximations to estimate the value of $\frac{6.8 \times 31.2}{4.9}$

$$\frac{7 \times 30}{5} \text{ (1)}$$

$$210 \div 5 \text{ (1)}$$

Answer 42 (1)

[3 marks]

6

Jo buys 3 sandwiches at £2.45 each and a drink for £1.20

She pays with a £10 note.

Work out how much change she gets.

$$3 \times 2.45 = 7.35 \text{ (1)}$$

$$7.35 + 1.20 = 8.55 \text{ (1)}$$

Answer £ 1.45 (1)

[3 marks]

7

Work out

(a) 0.3^2 Answer 0.09 (1)

[1 mark]

(b) $(-4)^2$ Answer 16 (1)

[1 mark]

(c) 0.2^3 Answer 0.008 (1)

[1 mark]

8

- (a) Tom says, “4.5 rounded to the nearest whole number is 4”

Explain why Tom is wrong.

A 5 rounds up, so the answer is 5 (1)

[1 mark]

- (b) A number rounded to 1 decimal place is 7.4

Write down the smallest value the number could be.

Answer 7.35 (1)

[1 mark]

Question	Topic	RAG
1	I can order decimals, including negatives	
2	I can add and subtract decimals and multiply and divide by powers of 10	
3	I can multiply and divide decimals by whole numbers	
4	I can round to decimal places and significant figures	
5	I can estimate by rounding to 1 significant figure	
6	I can solve a money problem	
7	I can square and cube decimals and negatives	
8	I can reason about rounding	