



Scan for the solutions

Name: _____ **Date:** _____ **Score:** _____ / 36

- 1**
- a. Write 7.3846 correct to 1 decimal place.
 - b. Write 7.3846 correct to 2 decimal places.
 - c. Write 7.3846 correct to 3 decimal places.
 - d. Write 0.0962 correct to 2 decimal places.

(4 marks)

Answer _____

- 2**
- a. Write 58 362 correct to 1 significant figure.
 - b. Write 58 362 correct to 3 significant figures.
 - c. Write 0.004718 correct to 2 significant figures.
 - d. Write 3.0951 correct to 3 significant figures.

(4 marks)

Answer _____

- 3** Katie says
" $6.2 \times 48.9 = 3031.8$ "
Without working out the exact answer, explain how you can tell that Katie's answer must be wrong.

(1 mark)

Answer _____

4

- Truncate 8.479 to 1 decimal place.
- Truncate 8.479 to 2 decimal places.
- Write 8.479 correct to 1 decimal place. Explain why your answer is different from your answer to part a.

(3 marks)

Answer _____

5

The mass of a parcel is 340 g, correct to the nearest 10 g.
Complete the error interval for the mass, m grams, of the parcel.

..... $\leq m <$

(2 marks)

Answer _____

6

Work out an estimate for the value of

$$\begin{array}{r} 39.6 \times 5.12 \\ \hline 0.48 \end{array}$$

You must show your working.

(3 marks)

Answer _____

7

- Work out an estimate for 62.3×4.87
- You are given that $623 \times 487 = 303,401$
Use this fact to write down the exact value of 62.3×4.87

(3 marks)

Answer _____

- 8** You are given that $34 \times 26 = 884$
Use this fact to write down the value of
- a. 3.4×26
 - b. 340×2.6
 - c. 0.34×0.26
 - d. $884 \div 2.6$

(4 marks)

Answer _____

- 9** A number d is truncated to 1 decimal place.
The result is 12.4
Complete the error interval for d .
..... $\leq d <$

(2 marks)

Answer _____

- 10** A number y is 0.08, correct to 1 significant figure.
Complete the error interval for y .
..... $\leq y <$

(2 marks)

Answer _____

- 11** A rectangular floor is 4.2 m long and 3.1 m wide.
Flooring costs £24.60 per square metre.
- a. By rounding each number to 1 significant figure, work out an estimate for the cost of flooring for the whole floor.
 - b. Is your answer to part (a) an underestimate or an overestimate of the actual cost?
Give a reason for your answer.

(4 marks)

Answer _____

12 Tia and Sam each ran 100 m.

Tia's time was 12.4 seconds, correct to 1 decimal place.

Sam's time was 12.4 seconds, truncated to 1 decimal place.

- a. Write down the error interval for Tia's time, t seconds.
- b. Write down the error interval for Sam's time, s seconds.
- c. Tia says, "I definitely ran faster than Sam." Is Tia right? Give a reason for your answer. (4 marks)

Answer _____

End of questions | Total 36 marks