GCSE FOUNDATION · REVISION MAT 5

Rounding and error intervals

1 Round 5.0738

(a) to 1 decimal place

(b) to 2 significant figures.

2 Round 0.03048 to 3 significant figures.

3 Isla rounds 12.97 to 1 decimal place. Isla writes 12.10

Explain the mistake Isla has made.

4 A height is 8.3 m, correct to 1 decimal place.

Leo says the smallest the height could be is 8.2 m.

Explain why Leo is wrong.

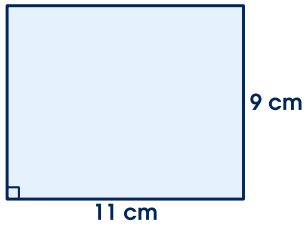
5 Each brick weighs 2.3 kg, to the nearest 0.1 kg.

A shelf can hold up to 120 kg.

50 of them are put on the shelf.

Could the shelf be overloaded?
Show how you decide.

6 A rectangle has length 11 cm and width 9 cm, both to the nearest cm.



(a) Write down the error interval for the length.

(b) Work out the smallest possible perimeter.

ANSWERS · REVISION MAT 5

Rounding and error intervals

1 (a) **5.1**

(b) **5.1**

2 **0.0305**

3 The digit after the last place is 5 or more, so it rounds up and carries over.

12.97 → **13**

4 Half of 0.1 m is 0.05 m, so the smallest height is **8.25 m**

5 Greatest mass of one = 2.35 kg

50 × 2.35 = 117.50 kg

No, because even 117.50 kg is not more than 120 kg.

6 (a) **10.5 ≤ length < 11.5**

(b) 2 × (10.5 + 8.5) = **38 cm**

Mr&Mrs MATHS