GCSE FOUNDATION · REVISION MAT 3

Rounding and error intervals

1 Round 0.4862

(a) to 1 decimal place

(b) to 2 significant figures.

2 Round 2609 to 3 significant figures.

3 Maya rounds 9.96 to 1 decimal place. Maya writes 9.10

Explain the mistake Maya has made.

4 A crowd is 300 people, to the nearest 100.

Leo says the smallest the crowd could be is 299 people.

Explain why Leo is wrong.

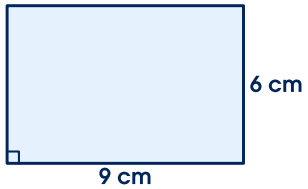
5 Each crate weighs 35 kg, to the nearest 5 kg.

A shelf can hold up to 220 kg.

6 of them are put on the shelf.

Could the shelf be overloaded?
Show how you decide.

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



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

(b) Work out the smallest possible perimeter.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Rounding and error intervals

1 (a) **0.5**

(b) **0.49**

2 **2610**

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

9.96 → **10**

4 Half of 100 is 50, so the smallest crowd is **250 people**

5 Greatest mass of one = 37.5 kg

6 × 37.5 = 225 kg

Yes, because 225 kg is more than 220 kg.

6 (a) **8.5 ≤ length < 9.5**

(b) 2 × (8.5 + 5.5) = **28 cm**