GCSE FOUNDATION · REVISION MAT 4

Rounding and error intervals

1 Round 18.349

(a) to 1 decimal place

(b) to 2 significant figures.

2 Round 395 721 to 3 significant figures.

3 Zak rounds 4.995 to 2 decimal places. Zak writes 4.100

Explain the mistake Zak has made.

4 A time is 12 seconds, to the nearest second.

Leo says the time could be 12.6 seconds.

Explain why Leo is wrong.

5 Each can of beans weighs 0.4 kg, to the nearest 0.1 kg.

A shelf can hold up to 18.5 kg.

40 of them are put on the shelf.

Could the shelf be overloaded?
Show how you decide.

6 A rectangle has length 15 cm and width 4 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 4

Rounding and error intervals

1 (a) **18.3**

(b) **18**

2 **396 000**

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

4.995 → **5**

4 12.6 s would round to 13 s, so **the time is less than 12.5 s**.

5 Greatest mass of one = 0.45 kg

40 × 0.45 = 18 kg

No, because even 18 kg is not more than 18.5 kg.

6 (a) **14.5 ≤ length < 15.5**

(b) 2 × (14.5 + 3.5) = **36 cm**

Mr&Mrs MATHS