GCSE FOUNDATION · REVISION MAT 1

Rounding and error intervals

1 Round 7.468

(a) to 1 decimal place

(b) to 2 significant figures.

2 Round 48 362 to 3 significant figures.

3 Ella rounds 6.97 to 1 decimal place. Ella writes 6.10

Explain the mistake Ella has made.

4 A length is 70 cm, to the nearest 10 cm.

Leo says the smallest the length could be is 69.5 cm.

Explain why Leo is wrong.

5 Each bag of flour weighs 1.5 kg, to the nearest 0.1 kg.

A shelf can hold up to 18.5 kg.

12 of them are put on the shelf.

Could the shelf be overloaded? Show how you decide.

6 A rectangle has length 8 cm and width 5 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 1

Rounding and error intervals

1 (a) **7.5**

(b) **7.5**

2 **48 400**

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

6.97 → **7**

4 Half of 10 cm is 5 cm, so the smallest length is 70 – 5 = **65 cm**

5 Greatest mass of one = 1.55 kg

12 × 1.55 = 18.60 kg

Yes, because 18.60 kg is more than 18.5 kg.

6 (a) **7.5 ≤ length < 8.5**

(b) 2 × (7.5 + 4.5) = **24 cm**