GCSE HIGHER · REVISION MAT 1

Rounding and error intervals

1 Round 3.4567 to 2 decimal places.

2 Round 0.004719 to 2 significant figures.

3 $x = 6.3$, correct to 1 decimal place.

Write down the error interval for x.

4 Estimate the value of

$$\frac{48.7 \times 3.1}{0.52}$$

5 A length is 12 cm to the nearest cm.

Could it be 12.5 cm? Explain.

6 $y = 2.7$, truncated to 1 decimal place.

Write down the error interval for y.

7 20 bags each weigh 5 kg, to the nearest kg.

Show that the total could be as low as 90 kg.

8 n is a whole number.

n is 300 to 1 s.f. and 250 to 2 s.f.

Find all possible values of n.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Rounding and error intervals

1 **3.46**

2 **0.0047**

3 **$6.25 \leq x < 6.35$**

4 $\dfrac{50 \times 3}{0.5}$

≈ 300

5 $11.5 \leq L < 12.5$

No: 12.5 would round to 13.

6 **$2.7 \leq y < 2.8$**

7 Lower bound 4.5 kg

4.5 × 20 = 90 kg

8 $250 \leq n < 350$ and $245 \leq n < 255$

250, 251, 252, 253, 254

Mr&Mrs MATHS