GCSE FOUNDATION · REVISION MAT 5

Estimation

1 By rounding each number to 1 significant figure, estimate the value of

4.86×31.2

2 Estimate the value of

$$\frac{291 + 112}{19.7}$$

3 Xena estimates 3.6×9.8 as $4 \times 10 = 40$

Will the exact answer be bigger or smaller than 40? Explain your answer.

4 Show that 1.97×303 is approximately 600.

5 Petrol costs £1.45 per litre.

Lucy fills her car with 52.3 litres. She has £70.

Use estimation to decide whether she has enough money.

6 356 students are going on a trip.

Each coach has 58 seats.

(a) Estimate the number of coaches needed.

(b) How many coaches are actually needed? Explain why your estimate might not be enough.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Estimation

1 $5 \times 30 = \mathbf{150}$

2 $\dfrac{300 + 100}{20} = \mathbf{20}$

3 **Smaller**. Both numbers were rounded up.

(Exact: 35.28)

4 $2 \times 300 = 600$ ✓

5 $1.4 \times 50 = 70$

Estimate £70, so **yes**.

(Exact: £75.84)

6 (a) $400 \div 60 = 6.66667 \rightarrow$ about **7**

(b) $356 \div 58 = 6.1$, so **7** coaches.
Rounding can hide students left over.