GCSE FOUNDATION · REVISION MAT 1

Estimation

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

38.7×5.12

2 Estimate the value of

$$\frac{412 + 189}{2.96}$$

3 Tom estimates 6.8×3.9 as $7 \times 4 = 28$

Will the exact answer be bigger or smaller than 28? Explain your answer.

4 Show that 49.6×0.21 is approximately 10.

5 Petrol costs £1.48 per litre.

Lucy fills her car with 39.4 litres. She has £50.

Use estimation to decide whether she has enough money.

6 312 students are going on a trip.

Each coach has 49 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 1

Estimation

1 $40 \times 5 = \mathbf{200}$

2 $\dfrac{400 + 200}{3} = \mathbf{200}$

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

(Exact: 26.52)

4 $50 \times 0.2 = 10$ ✓

5 $1.5 \times 40 = 60$

Estimate £60 is more than £50, so **probably not**.

(Exact: £58.31)

6 (a) $300 \div 50 = 6 \rightarrow$ about **6**

(b) $312 \div 49 = 6.4$, so **7** coaches.

Rounding can hide students left over.