GCSE HIGHER · REVISION MAT 1

Estimation

1 Estimate

$$49.8 \times 3.1$$

2 Estimate

$$\frac{612 \times 0.49}{2.03}$$

3 Is $31 \times 19 = 789$ sensible?

Use an estimate to decide.

4 Petrol costs £1.42 per litre.

A tank holds 48 litres.

Estimate the cost of filling it.

Is this an over- or underestimate?

5 Estimate

$$\sqrt{98} \times 4.1$$

6 Estimate the area of a circle of radius 6.1 cm.

7 Estimate

$$\frac{3.87^2 + 6.1}{0.198}$$

8 Estimate the number of seconds in a year.

Give your answer in standard form to 1 s.f.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Estimation

1 50×3

≈ 150

2 $\dfrac{600 \times 0.5}{2}$

≈ 150

3 $30 \times 20 = 600$

No: the answer should be about 600 (it is 589).

4 1.5×50

≈ £75, an overestimate (both rounded up)

5 $\sqrt{100} \times 4$

≈ 40

6 3×6^2

≈ 108 cm² (about 110 cm²)

7 $\dfrac{16 + 6}{0.2} = \dfrac{22}{0.2}$

≈ 110

8 $60 \times 60 \times 24 \times 365$

$\approx 3600 \times 9000$

$\approx 3 \times 10^7$

Mr&Mrs MATHS