GCSE HIGHER · REVISION MAT 2

Estimation

1 Estimate

7.9×41

2 Estimate

$$\frac{96.3}{0.48}$$

3 Tom estimates
289×51 as 15 000.

Is this a good estimate? Explain.

4 58 students go on a trip.

The coach costs £395.

Entry is £8.95 per student.

Estimate the total cost.

5 Estimate

$\sqrt{80}$

Is the answer more or less than your estimate?

6 Estimate the volume of a cylinder with radius 3.9 cm and height 10.2 cm.

7 Estimate

$$\frac{21.4 \times 0.31}{0.0487}$$

8 A heart beats about 70 times a minute.

Estimate how many times it beats in 80 years.

Give your answer in standard form.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Estimation

1 8×40

≈ 320

2 $\frac{100}{0.5}$

≈ 200

3 $300 \times 50 = 15\,000$

Yes, it rounds each number to 1 s.f.

4 $400 + 60 \times 9$

≈ £940

5 $\sqrt{8T} = 9$

≈ 9, slightly less

6 $3 \times 4^2 \times 10$

≈ 480 cm³

7 $\frac{20 \times 0.3}{0.05} = \frac{6}{0.05}$

≈ 120

8 $70 \times 60 \approx 4000$ per hour

$\times 24 \times 365 \approx 4 \times 10^7$ per year

≈ 3×10^9

Mr&Mrs MATHS