GCSE HIGHER · REVISION MAT 3

Estimation

1 Estimate

$302 \div 5.9$

2 Estimate

0.52×7980

3 Explain why rounding to 1 significant figure is useful for estimating.

4 A field is 198 m by 52 m.

A bag of seed covers 400 m².

Estimate the number of bags needed.

5 Estimate

$$\frac{\sqrt{24.6} \times 7.8}{1.9}$$

6 Estimate how many 0.48-litre bottles can be filled from 19.6 litres.

7 Estimate

$(5.03 \times 10^{4}) \times (3.9 \times 10^{-2})$

8 Estimate

$$\frac{9.87^2 - \sqrt{48.9}}{0.312 \times 19.8}$$

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Estimation

1 $300 \div 6$

≈ 50

2 0.5×8000

≈ 4000

3 **The numbers become easy to work with mentally, giving a quick check.**

4 $200 \times 50 = 10\,000\ m^2$

$10\,000 \div 400$

≈ 25 bags

5 $\frac{5 \times 8}{2}$

≈ 20

6 $20 \div 0.5$

≈ 40

7 $5 \times 4 \times 10^2$

≈ 2000

8 $\frac{100 - 7}{0.3 \times 20} = \frac{93}{6}$

≈ 15

Mr&Mrs MATHS