GCSE HIGHER · REVISION MAT 5

Estimation

1 Estimate

4.92^2

2 Estimate

$$\frac{59.7 + 40.6}{4.87}$$

3 Jo says $0.31 \times 0.48 \approx 1.5$.

Explain her mistake.

4 A shop sells 287 items at £4.85 each.

Estimate the total takings.

5 Estimate $\sqrt{150}$ to 1 decimal place.

6 A pace is about 0.6 m.

Estimate the number of paces to walk 1.8 km.

7 Estimate

$$\frac{(2.1 \times 10^3)(5.8 \times 10^{-1})}{3.05 \times 10^2}$$

8 Estimate the percentage error when π is rounded to 3.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Estimation

1 5^2

≈ 25

2 $\frac{60 + 40}{5}$

≈ 20

3 $0.3 \times 0.5 = 0.15$

She has put the decimal point in the wrong place.

4 300×5

≈ £1500

5 $12^2 = 144$, $12.5^2 = 156.25$

≈ 12.2

6 $1800 \div 0.6$

≈ 3000 paces

7 $\frac{2000 \times 0.6}{300} = \frac{1200}{300}$

≈ 4

8 $\frac{3.14 - 3}{3.14} \times 100$

$\approx \frac{0.14}{3} \times 100$

≈ 5%

Mr&Mrs MATHS