# Quick Test - Estimation skills

1. Without using a calculator, estimate the following answers

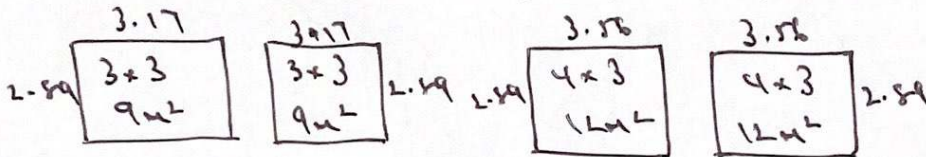| | | |
|---|---|---|
| a. | 6867 x 1.98 = | $7000 \times 2 = 14000$ |
| b. | 8091 x 0.92 = | $8000 \times 1 = 8000$ |
| c. | 39.5 x 1.7 x 5.003 = | $40 \times 2 \times 5 = 400$ |
| d. | 44.44 ÷ 9.85 = | $40 \div 10 = 4$ |
| e. | 32204 ÷ 3134 = | $30000 \div 3000 = 10$ |
| f. | (59.35 x 9656) ÷ 9.92 = | $(60 \times 10000) \div 10 = 600000 \div 10 = 60,000$ |
| g. | 7085 x 2.04 = | $7000 \times 2 = 14,000$ |
| h. | 99 x 2.54 x 2.431 = | $100 \times 3 \times 2 = 600$ |
| i. | 23 x 22 x 21 = | $20 + 20 \times 20 = 8000$ |
| j. | 9156 ÷ 91 = | $9000 \div 90 = 100$ |
| k. | 62000 ÷ 976 = | $60000 \div 1000 = 60$ |
| l. | π ÷ 3 = | $3 \div 3 = 1$ |

2. At the start of the week, a shop had approximately 26000 cartons of orange juice in stock. The shop sold 1487 on Monday, 2659 on Tuesday, 1678 on Wednesday, 1478 on Thursday, 2967 on Friday. Estimate the number of cartons remaining.

$26000 - 1000 = 25000$

$25000 - 3000 = 22000$

$22000 - 2000 = 20000$

$20,000 - 1000 = 19000$

$19000 - 3000 = \underline{16000}$

3. Mercy is painting her front room and needs to estimate the size, to buy enough paint to cover the walls. Two of the walls measure 3.17m x 2.89m, and the other two walls measure 3.56m x 2.89m

a. Estimate the area of the walls that Mercy needs to paint

b. If one tin of paint covers 9m², how many tins of paint will Mercy need?

3.17

$2.89 \begin{array}{|c|} \hline 3 \times 3 \\ 9m^2 \\ \hline \end{array}$

3.17
$\begin{array}{|c|} \hline 3 \times 3 \\ 9m^2 \\ \hline \end{array} 2.89$

$2.89 \begin{array}{|c|} \hline 4 \times 3 \\ 12m^2 \\ \hline \end{array}$  3.56

3.56
$\begin{array}{|c|} \hline 4 \times 3 \\ 12m^2 \\ \hline \end{array} 2.89$

a) 42m²

b) 5 × 9 = 45m²    Mercy will need 5 tins of paint.

4. Explain how these calculations are wrong:

| a. | 13 x 0.9 = 11.6 | 13 × 1 = 13 |
|----|-----------------|-------------|
| b. | 56 x 236 = 780 | 60 × 200 = 12 000 |
| c. | 0.8 ÷ 1.4 = 1.2 | $\frac{0.8}{1.4} = \frac{8}{14} \neq \frac{7}{14} = 0.5$ |
| d. | 5³ = -125 | 5 × 5 × 5 = 125 (not negative) |
| e. | 25 x -25 = 625 | 25 × 25 = 625 (not negative) |
| f. | 0.8 x 12 = 13.3 | 1 × 12 = 12 |
| g. | ∛8 = 4 | ∛8 = 2    2 × 2 × 2 = 8 |
| h. | 0.05² = 0.25 | 0.05 × 0.05 = 0.0025 = 0.0025 |