

1. {Estimates are all single digit \times single digit BUT all “chop” never round up}

(a) Work out an estimate for 6.1×8.3

(b) Maggie writes down the following

$$2.4 \times 5.1 = 1.224$$

Without doing the exact calculation, explain why Maggie’s answer cannot be correct.

(c) A teacher writes down this calculation 5.3×7.2

and three possible answers.

3.816

38.16

381.6

The teacher says “One of these answers is correct”

Without doing the exact calculation, write the correct answer and explain how you know.

2. The width, W m, of a lawn is measured as 17 m correct to the nearest metre.

{OR length, L OR height, H with units cm OR m OR km}

{OR volume, V , litres}

Complete the following statement to show the range of possible values of W

$$\dots \leq W < \dots$$

3. {Estimates are all single digit \times single digit WITH a mix of “chop” and round up}

(a) Work out an estimate for 6.75×6.5

(b) Ronnie writes down the following

$$6.5 \times 3.7 = 2.405$$

Without doing the exact calculation, explain why Ronnie’s answer cannot be correct.

(c) A teacher writes down this calculation 2.8×7.6

and four possible answers.

2128

212.8

21.28

2.128

The teacher says “One of these answers is correct”

Without doing the exact calculation, write the correct answer and explain how you know.

4. {Estimates are single digit OR double digit \times double digit OR triple digit}

Work out an estimate for 56×25

5. {Word problem with estimate: are single OR double digit \times double OR triple digit}

Omar buys 28 fence posts costing £4.32 each.

Estimate the total cost of the fence posts Omar buys.

6. John rounds a number, x , to one decimal place.

The result is 5.7{single/double/trebleDigit.tenth NB tenth is never 0}

Write down the error interval for x .

7. {As strand 5 but with part(b) PLUS some questions have change of unit}

A club wants to take a coach party of 35 to a stately house and gardens.

The entry fee is £8.75 per person.

- (a) Estimate the total cost of the coach party's entry fees.
(b) Is your answer to (a) an underestimate or an overestimate?
Give a reason for your answer.

8. The width, W cm, of a wardrobe is measured as 56 cm correct to the nearest 0.5* cm.

{OR length, L OR height, H OR depth, D with units mm OR cm OR m OR km}

{OR volume, V , litres OR weight, W OR mass, M grams OR kg }

Complete the following statement to show the range of possible values of W

{*nearest 0.2 or 2 or 5 or 10 or 20 or 100 } $\leq W <$