

Misconceptions

Can you spot the mistakes?

Question 1

- a) Calculate 7×8
- b) Hence, calculate $56 \div 8$

a) $7 \times 8 = 56$

b) $8 \overline{) 56}$ $8 \overline{) 56}$?

8 can't go into 5.

Question 2

Calculate $918 \div 9$

$12.$

$9 \overline{) 918}$

$9 \times 1 = 9$

$9 \times 2 = 18$

$918 \div 9 = 12.$

Question 3

Avocados come in bags of four. How many bags can 521 avocados fill?

$$\begin{array}{r} 130.25 \\ 4 \overline{) 521.00} \\ \underline{4} \\ 12 \\ \underline{12} \\ 1 \\ \underline{0} \\ 10 \\ \underline{8} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

So 130 bags.

Question 4

A team of 7 win £238 in a raffle. They share the money equally. How much will each team member get?

1	2	4	8	16	32	46
7	14	28	56	112	224	238

28	112	224	243 ÷ 7 = 46
+ 28	+ 112	+ 14	Check
<u>56</u>	<u>224</u>	<u>238</u>	46 × 7 = 243

Question 5

Joe buys a bike for £460. He pays a £60 deposit and the rest in 10 monthly payments. How much is each payment?

$$\begin{aligned} &£460 - £60 = £400 \\ &£400 \div 10 = £40 \\ &\text{He pays } £4.00 \text{ p/m} \end{aligned}$$

Question 6

Mrs Eggerson puts 230 eggs into boxes. Each box holds 12 eggs. How many egg boxes does Mrs Eggerson need to put all the eggs into boxes?

$$\begin{aligned} &230 \div 12 \\ &115 \div 6 \\ &019 \text{ r } 1 \\ &6 \overline{) 115} \\ &\begin{array}{r|l} 1 & 6 \\ \hline 2 & 12 \\ 4 & 24 \\ 8 & 48 \\ 9 & 54 \end{array} & 19 \text{ boxes} \\ &1 \text{ left over} \end{aligned}$$