**Clumsy Clive On Fractions - Answers**

Clive is tackling his fractions homework and knows that he’s made mistakes somewhere.

Can you spot and correct the mistakes Clive has made?

Can you explain what mistakes Clive has made, and maybe give him some tips so that he (hopefully) doesn’t make them again?

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| **Question 1:**Calculate $\frac{8}{9}-\frac{2}{3}$ giving your answer in its simplest form. |
| *Clive’s answer:* | *Your answer:* |
| $$\frac{8}{9}-\frac{2}{3}=\frac{6}{6}$$Answer:$$1$$ | Find a common denominator:$$\frac{8}{9}-\frac{6}{9}$$Answer:$$\frac{2}{9}$$ |
| *What mistake has Clive made?*Clive has just subtracted the numerators and denominators instead of finding a common denominator etc. |
| **Question 2:**Find $\frac{3}{8}$ of $£42$. |
| *Clive’s answer:* | *Your answer:* |
| Divide by the denominator:$$£42÷8=£5.25$$Add the numerator.Answer:$$£8.25$$ | Divide by the denominator:$$£42÷8=£5.25$$Multiply by the numerator.Answer:$$£15.75$$ |
| *What mistake has Clive made?*Clive has added the numerator instead of multiplying by it. |
| **Question 3:**Calculate $\frac{3}{8}+\frac{1}{4}$ giving your answer in its simplest form. |
| *Clive’s answer:* | *Your answer:* |
| Find a common denominator:$$\frac{12}{32}+\frac{8}{32}$$Answer: $\frac{20}{32}$ | Find a common denominator:$$\frac{3}{8}+\frac{2}{8}$$Answer: $\frac{5}{8}$ |
| *What mistake has Clive made?*Clive has not simplified his answer. |
| **Question 4:**Calculate $\frac{15}{32}÷1\frac{1}{4}$ giving your answer in its simplest form. |
| *Clive’s answer:* | *Your answer:* |
| Divide numerators.Divide denominators.Answer:$$\frac{15}{8}=1\frac{7}{8}$$ | Multiply by the reciprocal of $\frac{5}{4}$:$$\frac{15}{32}×\frac{4}{5}$$Answer: $\frac{3}{8}$ |
| *What mistake has Clive made?*Clive has got this completely wrong – he needs to multiply having turned $1\frac{1}{4}$ into an improper fraction. |
| **Question 5:**Calculate $2\frac{2}{3}×3\frac{1}{4}$ giving your answer as a mixed number in its simplest form. |
| *Clive’s answer:* | *Your answer:* |
| Multiply the whole numbers:$$2×3=6$$Multiply the fractions:$$\frac{2}{3}×\frac{1}{4}=\frac{2}{12}$$Answer:$$6\frac{1}{6}$$ | Turn into improper fractions:$$\frac{8}{3}×\frac{13}{4}$$Multiply:$$\frac{104}{12}$$Answer: $\frac{26}{3}=8\frac{2}{3}$ |
| *What mistake has Clive made?*Clive must convert to improper fractions before multiplying. |