

Hairdressing Practise Book

Fractions – Level Two – ANSWERS

Question 1a

$$56 - \frac{1}{3} \rightarrow 56 - 18.67 = \text{£}37.33$$

$$\text{£}37.33 + 49 = \text{£}86.33$$

Question 1b

$$\frac{1}{3} \text{ of } 51 \rightarrow 51 \div 3 = 17 \text{ so the discount is } \text{£}17$$

Question 2

$$34 \text{ out of } 102 \rightarrow \frac{34}{102} \rightarrow \frac{1}{3}$$

Question 3

$$\text{£}43 \text{ increased by } \frac{1}{10}$$

$$43 \div 10 = 4.3$$

$$43 + 4.3 = \text{£}47.30$$

Question 4

3 female half head foils with cut and blowdry with senior stylist

$$= 79 + 49 = 128 \times 3 = 384$$

1 male half head foils with cut and blowdry with senior stylist

$$= 79 + 37 = 116$$

Five females cut and blowdry with a stylist

$$= 45 \times 5 = 225$$

3 ladies had full head permanent colours plus cuts and blowdrys with a stylist

$$= 51 + 45 = 96 \times 3 = 288$$

1 male had full head permanent colours plus cuts and blowdrys with a stylist

$$= 51 + 33 = 84$$

One lady had a blowdry with the senior stylist

$$= 33$$

$$\text{Total} = 384 + 116 + 225 + 288 + 84 + 33 = 1130$$

$$\text{Divide by 10 to find a tenth} = 1130 \div 10 = 113$$

They will donate £113

Section 2

Question 1

$$3\frac{3}{4} + \frac{1}{5}$$

Turn the mixed number into an improper fraction. $\frac{15}{4} + \frac{1}{5}$

Find a common denominator

$$\frac{15 \times 5}{4 \times 5} \rightarrow \frac{75}{20} \text{ and } \frac{1 \times 4}{5 \times 4} \rightarrow \frac{4}{20}$$

$$\frac{75}{20} + \frac{4}{20} = \frac{79}{20} \text{ OR } 3\frac{19}{20}$$

Question 2

$1\frac{1}{2} = 6$ blocks and $\frac{3}{4} = 3$ blocks so 9 blocks out of 4 in total $\frac{9}{4}$ OR $2\frac{1}{4}$

$$\text{OR } 1\frac{1}{2} + \frac{3}{4} \rightarrow \frac{3}{2} + \frac{3}{4} \rightarrow \frac{6}{4} + \frac{3}{4} \rightarrow \frac{9}{4}$$

Question 3

$$112 \div 4 = 28\text{g}$$

Question 4

$$1 + \frac{1}{2} + \frac{1}{2} = 2\text{oz}$$

Section 3

Question 1

To add a fifth, divide each cost price by 5 and then add this amount to the cost price to get the selling price

Item	Cost Price	Working Out	Selling Price
Gyania Shampoo	£17.99	$17.99 \div 5 = 3.598$ $17.99 + 3.598 = 21.588$	£21.59
Gyania Conditioner	£16.50	$16.50 \div 5 = 3.3$ $16.5 + 3.3 = 19.8$	£19.80
Gyania Hairspray	£14.95	$14.95 \div 5 = 2.99$ $14.95 + 2.99 = 17.94$	£17.94

Question 2a

$260 \div 3 = 86.67$ This means that any amounts under 87 bottles would be less than $\frac{1}{3}$ of the stock

Need to reorder **conditioner**.

Question 2b

Batch of 260

$$14.95 \times 260 = £3887$$

Discount of $\frac{1}{5}$ is $3887 \div 5 = 777.5$

$$3887 - 777.5 = \mathbf{£3109.50}$$

Question 2c

$$20 \text{ out of } 260 \rightarrow \frac{20}{260} \rightarrow \frac{1}{13}$$

Section 4

Question 1

$$225 \text{ out of } 250 \rightarrow \frac{225}{250} \rightarrow \frac{9}{10}$$

Question 2

$$30 \text{ out of } 250 \rightarrow \frac{30}{250} \rightarrow \frac{3}{25}$$

Question 3

Is $\frac{1}{8}$ or $\frac{3}{25}$ bigger?

Find a common denominator $8 \times 25 = 200$

$$\frac{1 \times 25}{8 \times 25} \rightarrow \frac{25}{200} \quad \frac{3 \times 8}{25 \times 8} \rightarrow \frac{24}{200}$$

$$\frac{25}{200} \text{ is bigger than } \frac{24}{200}$$

We can see that $\frac{1}{8}$ is bigger so there were more issues last year than this year.

Question 4

$$10 \text{ out of } 15 \text{ answered the survey. } \frac{10}{15} \rightarrow \frac{2}{3}$$

Question 5

$$250 \div 3 \times 2 = 166.67$$

167 people