Hairdressing Practice Book

Fractions – Level Two - ANSWERS

Question 1a

56 – $\frac{1}{3}$ → 56 – 18.67 = £37.33

£37.33 + 49 = **£86.33**

Question 1b

$\frac{1}{3}$ of 51 → 51÷ 3 = 17 so the discount is **£17**

Question 2

34 out of 102 → $\frac{34}{102}$ → $\mathbf{\frac{1}{3}}$

Question 3

£43 increased by $\frac{1}{10}$

43 ÷ 10 = 4.3

43 + 4.3 = **£47.30**

Question 4

3 female half head foils with cut and blow-dry with senior stylist

= 79 + 49 = 128 x 3 = 384

1 male half head foils with cut and blow-dry with senior stylist

= 79 + 37 = 116

Five females cut and blow-dry with a stylist

= 45 x 5 = 225

3 ladies had full head permanent colours plus cuts and blow-drys with a stylist

= 51 + 45 = 96 x 3 = 288

1 male had full head permanent colours plus cuts and blow-drys with a stylist

= 51 + 33 = 84

One lady had a blow-dry with the senior stylist

= 33

Total = 384 + 116 + 225 + 288 + 84 + 33 = 1130

Divide by 10 to find a tenth = 1130 ÷ 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

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

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

Question 2

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

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

Question 3

112 ÷ 4 = **28g**

Question 4

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

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 ÷ 5 = 3.598 17.99 + 3.598 = 21.588	£21.59
Gyania Conditioner	£16.50	16.50 ÷ 5 = 3.3 16.5 + 3.3 = 19.8	£19.80
Gyania Hairspray	£14.95	14.95 ÷ 5 = 2.99 14.95 + 2.99 = 17.94	£17.94

Question 2a

260 ÷ 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 x 260 = £3887

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

3887 – 777.5 = **£3109.50**

Question 2c

20 out of 260 → $\frac{20}{260}$ → $\mathbf{\frac{1}{13}}$

Section 4

Question 1

225 out of 250 → $\frac{225}{250}$ → $\mathbf{\frac{9}{10}}$

Question 2

30 out of 250 → $\frac{30}{250}$ → $\mathbf{\frac{3}{25}}$

Question 3

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

Find a common denominator 8 x 25 = 200

$\frac{1\times25}{8\times25}$ → $\frac{25}{200}$ $\quad$ $\frac{\mathbf{3}\times8}{\mathbf{25}\times8}$ → $\frac{24}{200}$

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

We can see that $\mathbf{\frac{1}{8}}$ **is bigger so there was a higher proportion of issues last year compared to this year.**

Question 4

10 out of 15 answered the survey. $\frac{10}{15}$ → $\mathbf{\frac{2}{3}}$

Question 5

250 ÷ 3 x 2 = 166.67

167 people