

1 Lucy works in a clothes shop.

(a) In one week she earned \$277.20.

(i) She spent $\frac{1}{8}$ of this on food.

Calculate how much she spent on food.

$$\frac{1}{8} \times \$277.20 = \$34.65$$

Answer(a)(i) \$ 34.65 [1]

(ii) She paid 15% of the \$277.20 in taxes.
Calculate how much she paid in taxes.

$$\frac{15}{100} \times \$277.20 = \$41.58$$

Answer(a)(ii) \$ 41.58 [2]

(iii) The \$277.20 was 5% more than Lucy earned in the previous week.
Calculate how much Lucy earned in the previous week.

Previous week	increase	This week	
100%	5%	105%	$x = \frac{100}{105} \times \277.20
x		\$277.20	$x = \$264$

Answer(a)(iii) \$ 264 [3]

(b) The shop sells clothes for men, women and children.

(i) In one day Lucy sold clothes with a total value of \$2200 in the ratio

$$\text{men : women : children} = 2 : 5 : 4.$$

Calculate the value of the women's clothes she sold.

$$\begin{aligned} & \frac{5}{2+5+4} \times \$2200 \\ &= \frac{5}{11} \times \$2200 \\ &= \$1000 \end{aligned}$$

Answer(b)(i) \$ 1000 [2]

(ii) The \$2200 was $\frac{44}{73}$ of the total value of the clothes sold in the shop on this day.

Calculate the total value of the clothes sold in the shop on this day.

$$\begin{aligned} & \frac{73}{44} \times \$2200 \\ &= \$3650 \end{aligned}$$

Answer(b)(ii) \$ 3650 [2]