1. At Jumbo's Burger Bar, Jumbo burgers cost £J each and regular cokes cost £C each. Two Jumbo burgers and three regular cokes cost £5.95.

(a) Write an equation to show this.

(b) If one Jumbo Burger costs £2.15, what is the cost, in pence, of one regular coke?

(Total 4 marks)

2. A plumber in Australia charges 90 AUD per hour for work, plus a fixed cost. His total charge is represented by the cost function $C = 60 + 90t$, where t is in hours.

(a) Write down the fixed cost.

(1)

(b) It takes $3\frac{1}{2}$ hours to complete a job for Paula. Find the total cost.

(2)

(c) Steve received a bill for 510 AUD. Calculate the time it took the plumber to complete the job.

(3)
(Total 6 marks)

3. The cost c, in Australian dollars (AUD), of renting a bungalow for n weeks is given by the linear relationship $c = nr + s$, where s is the security deposit and r is the amount of rent per week.

Ana rented the bungalow for 12 weeks and paid a total of 2925 AUD.

Raquel rented the same bungalow for 20 weeks and paid a total of 4525 AUD.

Find the value of

(a) r, the rent per week;

(b) s, the security deposit.

(Total 8 marks)

4. The following table gives the postage rates for sending letters from the Netherlands. All prices are given in Euros (€).

Destination	Weight not more than 20 g	Each additional 20 g or part of 20 g
Within the Netherlands (zone 1)	€0.40	€0.35
Other destinations within Europe (zone 2)	€0.55	€0.50
Outside Europe (zone 3)	€0.80	€0.70

(a) Write down the cost of sending a letter weighing 15 g from the Netherlands to a destination within the Netherlands (zone 1).

(b) Find the cost of sending a letter weighing 35 g from the Netherlands to a destination in France (zone 2).

(c) Find the cost of sending a letter weighing 50 g from the Netherlands to a destination in the USA (zone 3).

(Total 8 marks)

5. The conversion formula for temperature from the Fahrenheit (F) to the Celsius (C) scale is given by $C = \frac{5(F-32)}{9}$.

(a) What is the temperature in degrees Celsius when it is 50° Fahrenheit?

There is another temperature scale called the Kelvin (K) scale.
The temperature in degrees Kelvin is given by $K = C + 273$.

(b) What is the temperature in **Fahrenheit** when it is zero degrees on the Kelvin scale?

(Total 8 marks)