1. Mandy sells mobile phones. She is paid $350 per week and an extra $40 for each phone she sells. Some weeks she doesn't sell any phones but she has sold as many as 10 phones in a week.

Describe the relationship between Mandy's wage and the number of phones she sells using a table and a graph.

Number of phones						
Mandy's weekly pay						

2. A Year 9 class wants to stage a concert to raise money. The setup costs including the hire of the venue and equipment is $500. There are no other costs as all performers are donating their time. They decide to charge $4 per ticket.

a Draw up a table showing the number of tickets sold (t) and the profit (P) using 200, 250, 300, 350 and 400 for values of t.

Number of tickets sold (t)					
Their profit (p)					

b. Use a graph to find the number of tickets that must be sold to make a profit of $400.

c. Find a rule for profit (P) using the number of tickets sold (t).

d How many tickets must they sell to cover their costs?

3. A catering business charges $50 for a meal for two people delivered to their home plus $10 for each additional person (up to eight people in total).

a. Draw up a table of values showing the number of people (p) and the cost (c).

b. Draw a graph that represents the relationship between the number of people (p) and the cost (c).

c. Write a rule for the relationship between the number of people and the cost of the meal and (in words or symbols).

4. The length of cardboard (c) needed to make a carton is four times the required side length (s) plus an overlap of 25 cm needed to glue it together. Use side length values of 20, 40, 60, 80, 100 to draw up a table of the side length and the length of cardboard required.

Draw a graph that represents the relationship between the length of cardboard (c) and the required side length (s). Write down the relationship between the length of cardboard and the side length (in words or with symbols).