1. Find the equation of the line through the points (1, 3) and (4, 2).

2. The initial cost of setting up a small factory to manufacture books is $5,000. Once the factory has been set up it costs $15 to make manufacture each book. The books are then sold at $35 each.
   (a) Give the equation of the total cost $C$ to the manufacturer of producing a quality $q$ books. (That is the cost of producing $q$ books.)
   \[ C(q) = \]

   (b) Give the equation for the total revenue $R$ if the manufacturer produces $q$ books.
   \[ R(q) = \]

   (c) Give a formula for the profit $\pi$ made by the company if $q$ books sold.
   \[ \pi(q) = \]

   (d) What number of books does the company need to sell to break even?
   Break even point is \[ \]