Printing Tickets

Susie is organizing the printing of tickets for a show.

She has collected prices from several printers and these two seem to be the best.

SURE PRINT
Ticket printing
25 tickets for $2

BEST PRINT
Tickets printed
$10 setting up
plus
$1 for 25 tickets

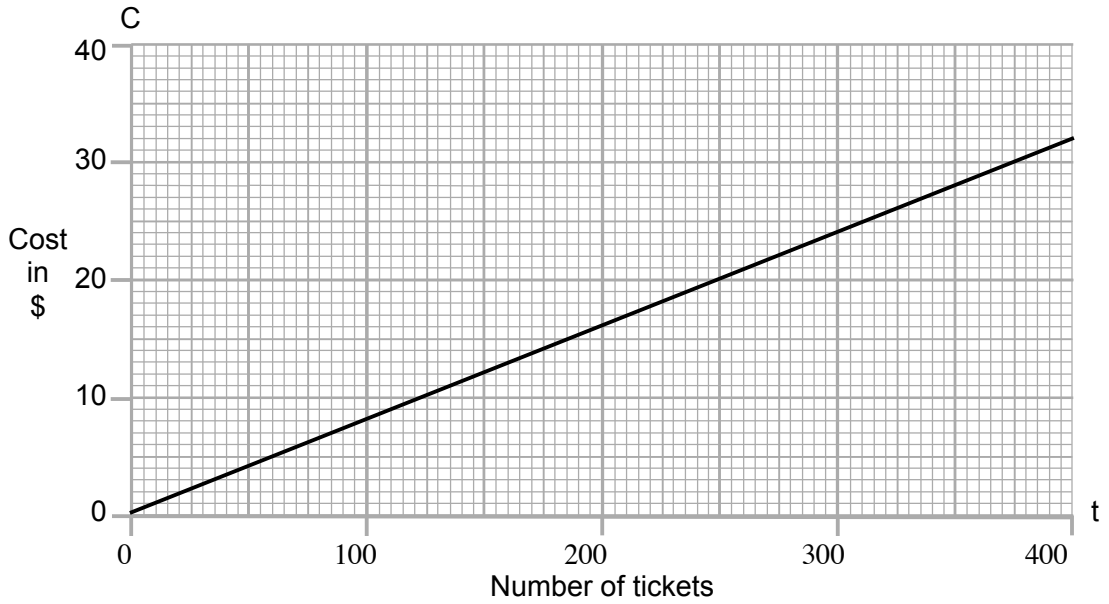
1. Using **C** for the cost of the printing and **t** for the number of tickets, Susie writes a formula for each of the printers. Here is her formula for *Sure Print*:

   Sure Print $C = \frac{2t}{25}$

   Write the formula for Best Print:

   Best Print C =

2. Susie's brother Rob has drawn *Sure Print*'s graph on a grid.
   Draw the graph for *Best Print*.



3. Susie uses algebra to find the values of C and t when the cost of printing the tickets is the same for both of the printers.

C = _____ t = _____

Show how Susie may have calculated C and t.

4. What do Rob's graphs and Susie's calculations tell us about the cost of the tickets?
Which company should Susie choose under what circumstances?

_____

_____

_____

_____

Printing Tickets	Rubric	
	Points	Section points
1. Gives correct formula such as: $C = \mathbf{10 + t / 25}$ *Partial credit* $C = t / 25$ or $C = \frac{t + 10}{25}$	2 (1)	2
2. Draws a correct graph from: **(0, 10)** to **(400, 26)**	1 ft 1 ft	2
3. Gives correct answers: $C =$ **20** $t =$ **250** Shows correct work such as: $2t \div 25 = 10 + t \div 25$ $2t = 250 + t$ $C = 2 \times 250 \div 25$	1 1 2	4
4. Gives a correct explanation such as: If Susie buys less than 250 tickets, Sure Price will be cheaper, and if she buys more than 250 tickets, Best Print will be cheaper. *Partial credit* For a partially correct explanation	2 ft (1)	2
Total Points		**10**