

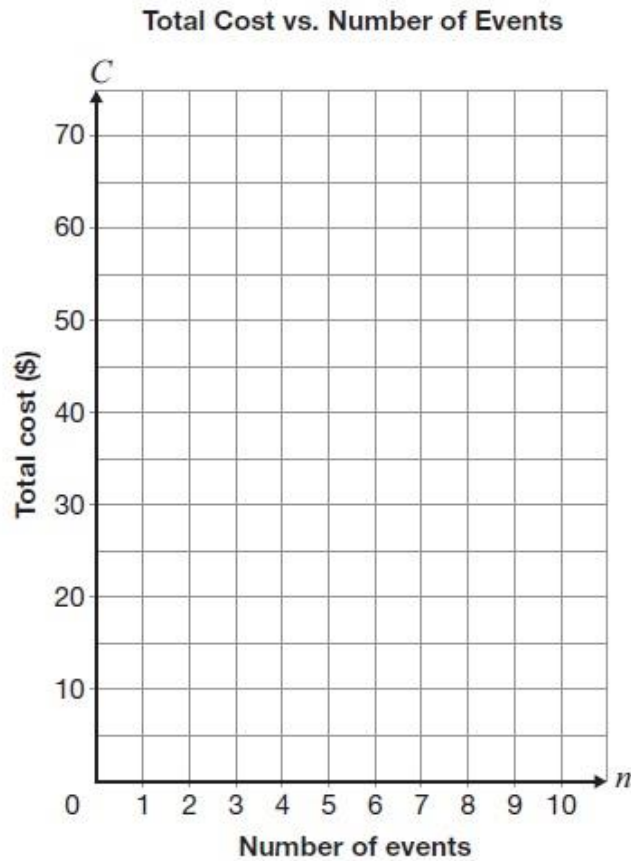
59 Event-full

At Lowell High School, the cost to attend special events depends on whether or not a student has purchased a \$10 discount card.

Option A: The student buys a discount card. The cost is \$5 per event.

Option B: The student does not buy a discount card. The cost is \$7.50 per event.

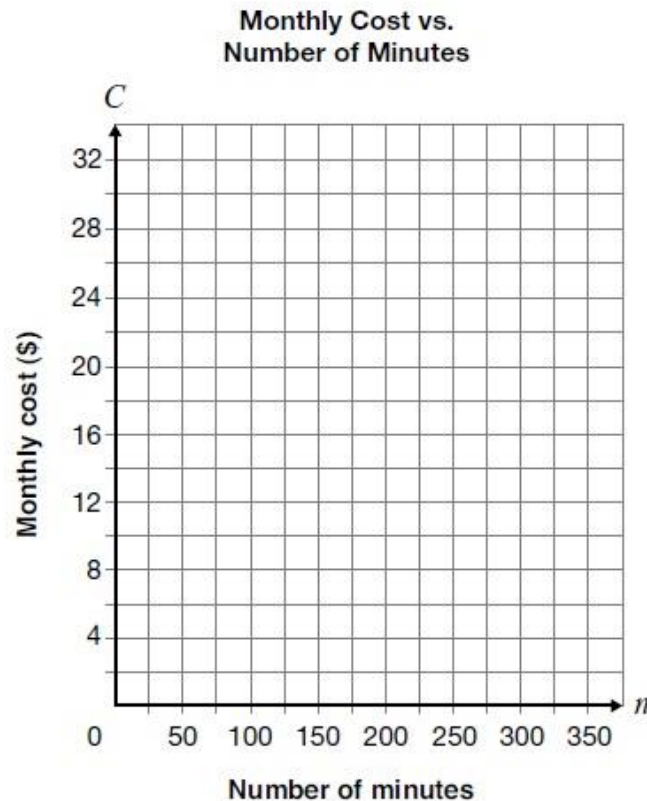
Graph the relationship between total cost and number of events for each option on the grid.



Determine the conditions under which a student at Lowell High School should choose each option. Justify your answer.

60 Cellphone Plans

Serge is choosing a cellphone plan and wants the lowest cost. Cell-a-Bration charges \$12 per month plus \$0.05 per minute for cellphone service. E-Phone charges \$28 per month for unlimited minutes.



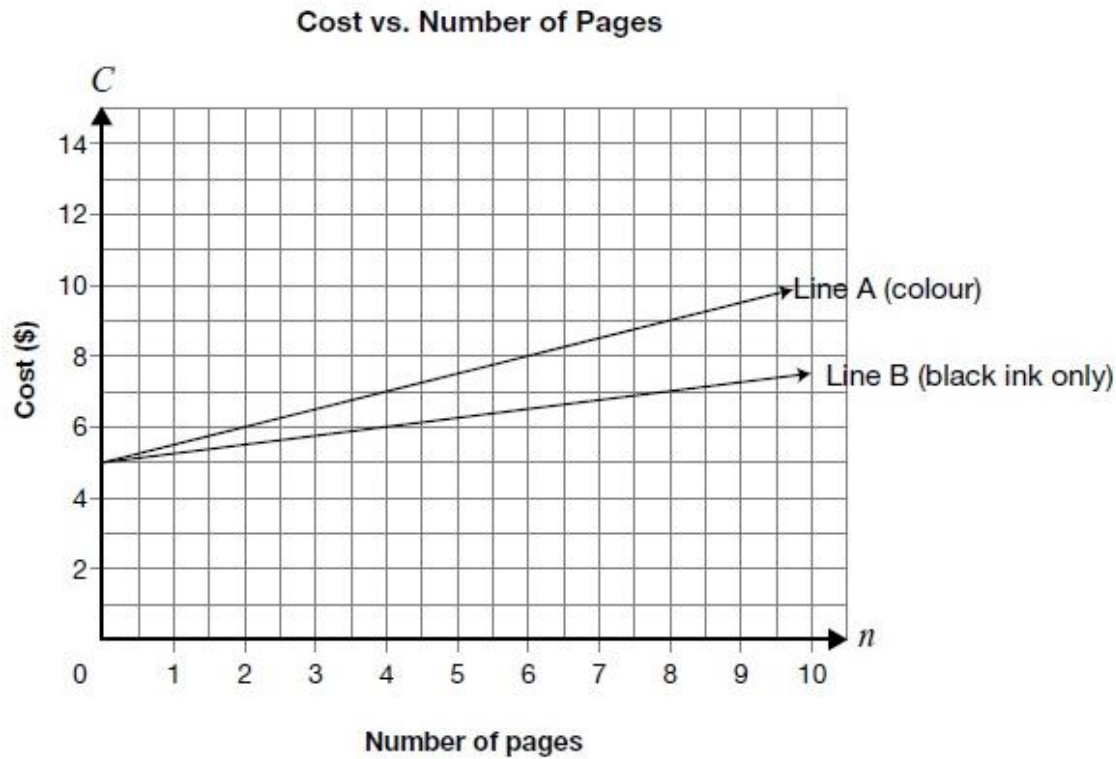
Determine under which conditions Serge should choose Cell-a-Bration and under which conditions Serge should choose E-Phone. Hint: calculate the break-even point algebraically and you should have 3 different conditions:

Justify your answer.

1. more than the break-even point
2. less than the break-even point
3. exactly at the break-even point

76 To Colour or Not to Colour

The graph below shows the cost to print a document at the Graphics Shop. Line A represents the cost of printing the document in colour. Line B represents the cost to print it with black ink only.



For a 500-page document, how much more will it cost to print in colour than with black ink only?

Show your work.

12 The Better Choice

Shane has a choice between two jobs helping people around his neighbourhood.

- **Job A:** Shane’s total pay is shown on the grid below.
- **Job B:** Shane will receive base pay of \$30, plus \$12.50 per hour.

Determine the conditions under which Shane should select Job A and the conditions under which he should select Job B.

Justify your answer.

