

Mathematics

Part C

Årskurs

9

Elevens namn och klass/grupp

Instructions

The box below the task contains a description of what your teacher will take into account in assessing your work. This task can give a maximum of 4 E-points, 4 C-points and 4 A-points.

It is very important that you show clearly how you have solved the tasks.

Aids: calculator and formula sheet.

Name: _____

School: _____ Class: _____

Date of birth (year/month/day): _____

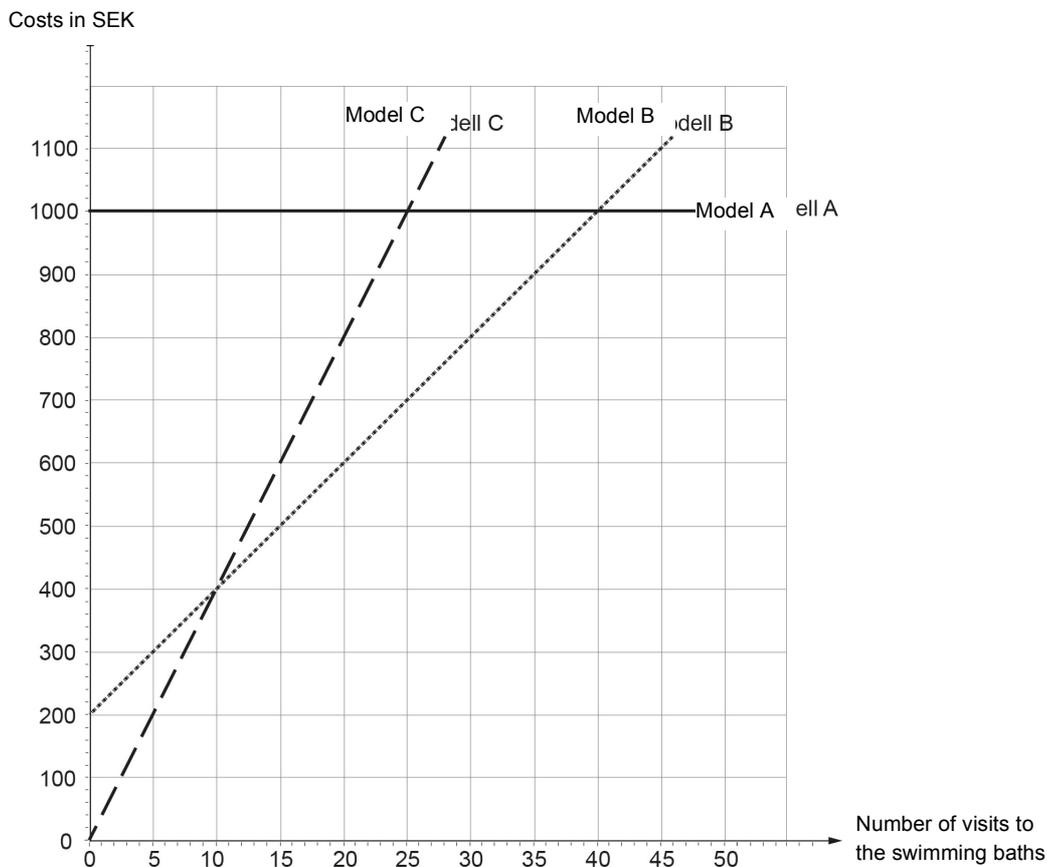
Girl Boy

The solutions and answers must not be written in the student booklet but must be written on a separate sheet of paper instead. The student booklet has to be handed in along with the solutions.

Good luck!

18. The swimming baths

You can choose between three different payment methods A, B and C when you visit the swimming baths during a year. The diagram shows the three payment models.



- Axel has chosen to pay according to model A, Beatrice according to model B and Charlie according to model C. In 2012 they all visited the swimming baths 20 times each. How much did each of them have to pay?
- Imagine that you are going to start swimming in the swimming baths and have to choose a payment model. Describe the advantages and disadvantages that the three different models have.
- Does any model or models show a cost that is proportional to the number of visits to the swimming baths? Explain for each of the models why they are proportional or not.
- For each payment model give a formula that you can use to calculate what it would cost irrespective of how many times you intend to visit the swimming baths during a year.

(4/4/4)

In assessing your work the teacher will take account of

- what mathematical knowledge you have shown and how well you have done the task
- how well you have presented your work
- how well you have motivated your answers.

