

MATHEMATICS TEST

Year 9

Part A – Oral Part

Information to the students

Version I – Smoking

Version II – The Children's Everyday Life

Version III – Upper Secondary School Programmes

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Information to the students

This exercise is an oral part included in the national test. The test is accomplished in groups of 3–4 students sitting together with the teacher around a table.

- Each one of you gets a paper with a diagram or a table, which you may study for a few minutes and familiarise yourself with. Then you will get a paper with a number of statements about the diagram/the table. Your teacher tells you in what order you shall present your arguments.
- Each one of you present some of the statements to the others in the group. You describe how you have, with the help of the diagram/the table, found if the statement is true or false. After each presentation the fellow-students may raise questions, make additions and argue for or against the reasoning.
- When all have made their presentations the group will discuss some questions that the teacher presents.
- Your achievements during the oral part are assessed from three aspects, *understanding, language and participation*.

To what extent you show that you have understood the task, the concepts included and the relations between these.

How clear and distinct your account is and how well you use the mathematical language.

To what extent you take part in the discussion, know how to argue for your ideas and give response to others' explanations.

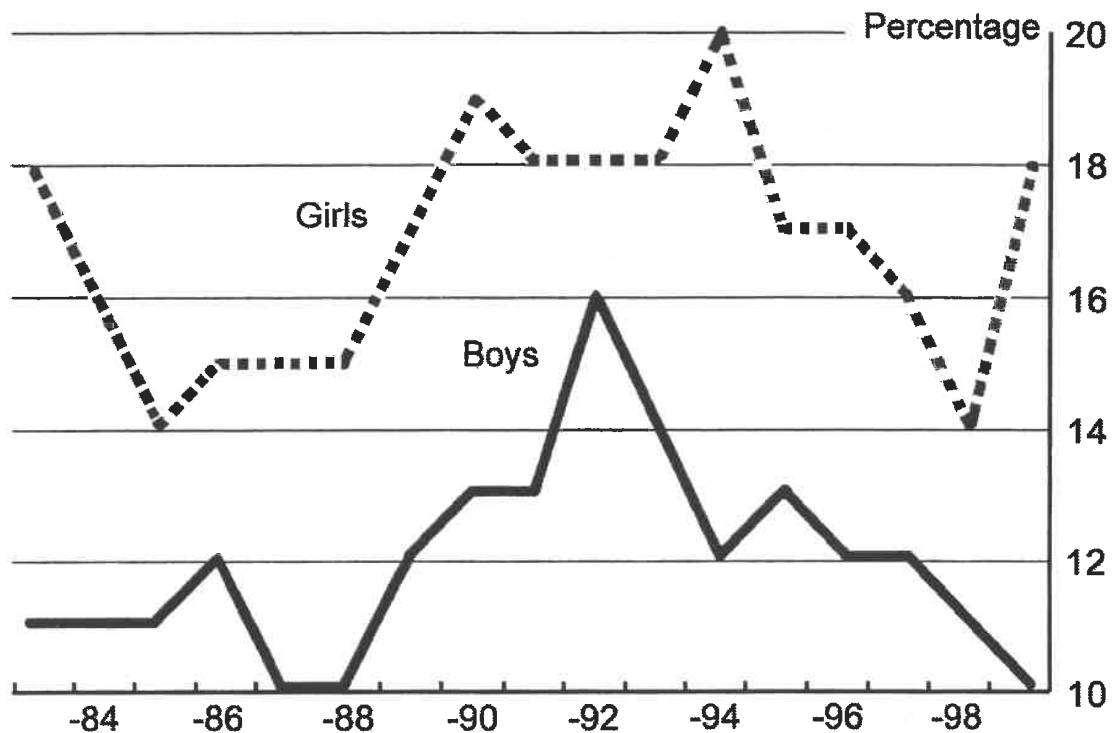
Consider that this is an opportunity to show what you know, both in your own presentation, in the discussion after the presentations of your fellow-students, and in the final discussion. Your achievements in this part are summarised and you are given a number of g- and vg-points. You can also show MVG-qualities. The result on the oral part is added to the results from other parts.

Part A
Version I – Smoking

Girls experienced smokers

Every year 8 000 persons die from smoking in Sweden. That means that one person dies of tobacco every hour. 25 000 young people start to smoke every year. That means that 70 young people start to smoke every day.

The percentage of students in form 9 that smoke every or almost every day.



Source: World Health Organisation (WHO), Swedish Council for Information on Alcohol and other Drugs (CAN).

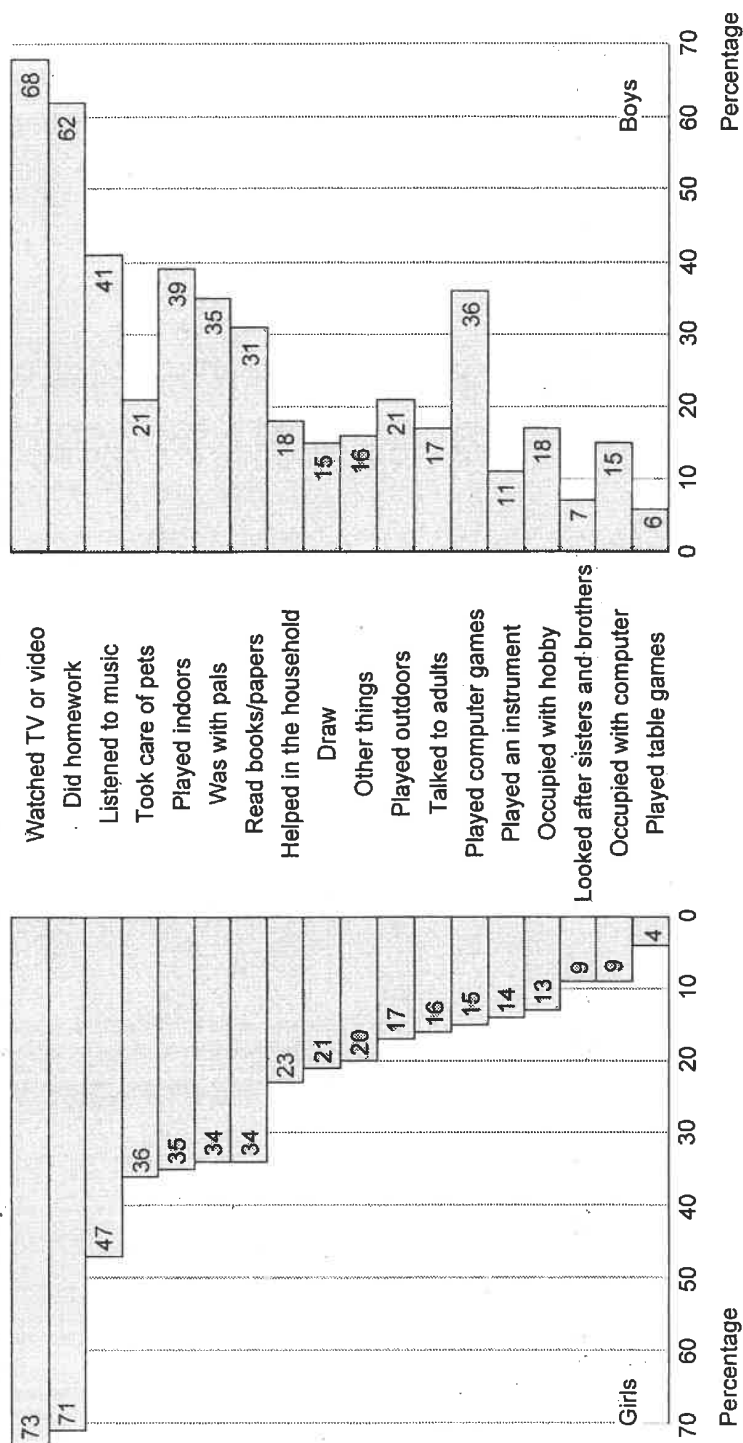
Part A
Version I – Smoking

The diagram shows that

1. the percentage of girls who smoke has varied between 14 % and 20 %.
2. the distance between two lines of the scale on the x -axis is two years.
3. in 1992 the percentage of boys in form 9 who did *not* smoke was 84 %.
4. in 1994 one fifth of all girls smoked.
5. during a period in the 1980ties no boys smoked.
6. twice as large percentage of girls smoked in 1999 as in 1998.
7. the percentage of smokers among girls respectively boys *increases* at the same time.
8. from 1994 to 1995 many girls quit smoking. ✖
9. in 1992 no girls started to smoke. ✖
10. during 1994 32 % of the students in form 9 smoked. ✖
11. there were *more* boys in form 9 who smoked in 1995 than in 1994. ✖
12. during the period 1992–94 the percentage of smoking boys was reduced by 25 %. ✖

Part A
Version II – The Children's Everyday Life

The children's everyday life (10 years old girls and boys)



Source: Statistics Sweden and Office of the Children's Ombudsman.

Part A
Version II – The Children's Everyday Life

The diagram shows that

1. twice as large percentage of boys as of girls "Played computer games".
2. the three most common occupations among boys were "Watched TV or video", "Did homework", "Played computer games".
3. book/paper reading is half as common as to do homework.
4. one out of four girls did "Other things".
5. almost 30 % of all the children "Took care of pets".
6. 88 % of the boys did not help in the household.
7. three out of 20 boys were "Occupied with computer".
8. almost 70 % of all the children "Was with pals". ✖
9. about half of the children "Played computer games". ✖
10. more than 100 % more boys than girls "Played computer games". ✖
11. at least 30 % of the boys both "Watched TV or video" and "Did homework". ✖
12. every child was occupied with not more than three activities. ✖

Part A
Version III – Upper Secondary School Programmes

The number of admission places and the number of first choice applicants to the upper secondary school programmes at 1999/2000, local government and county council authorities.

Programme	Number of places year 1	Number of first choice applicants	Percentage of women among first choice applicants	Percentage of all first choice applicants
The Child and Recreation Programme	5 200	3 910	70	4.1
The Construction Programme	2 510	2 810	3	3.0
The Electrical Engineering Programme	4 690	4 520	2	4.8
The Energy Programme	860	570	5	0.6
The Arts Programme	4 550	5 180	67	5.5
The Vehicle Engineering Programme	3 940	4 190	3	4.4
The Business and Administration Programme	4 870	3 840	50	4.1
The Handicraft Programme	1 560	2 400	84	2.5
The Hotel, Restaurant and Catering Programme	4 810	5 540	51	5.9
The Industrial Programme	2 580	1 550	7	1.6
The Food Programme	670	440	65	0.5
The Media Programme	3 400	4 650	50	4.9
The Use of Natural Resources Programme	2 750	2 630	61	2.8
The Natural Science Programme	18 720	17 840	41	18.9
The Health Care Programme	4 340	3 350	82	3.5
The Social Science Programme	22 660	21 790	64	23.1
Specially designed programmes	8 160	9 200	40	9.7
Total	96 270	94 410	48	100.0

Source: Statistics Sweden (SCB).

Part A
Version III – Upper Secondary School Programmes

The table shows that

1. the Food Programme had the least number of places.
2. there was a total of about 100 000 applicants to the upper secondary school.
3. there were as many women as men who applied for the upper secondary school.
4. 30 % of the first choice applicants to the Child and Recreation Programme were men.
5. about one fifth of all students applied as a first choice for the Natural Science Programme.
6. the two largest programmes attracted 21 % of all first choice applicants.
7. 1 920 men applied as a first choice for the Business and Administration Programme.
8. the number of places were sufficient for those who applied first choice.
9. there was a larger number of applicants per place in the Handicraft Programme than in the Hotel, Restaurant and Catering Programme. ✕
10. the number of women who applied for the Food Programme is larger than the number of women who applied for the Business and Administration Programme. ✕
11. according to data given for the Food Programme the total number of applicants for the upper secondary school should be 88 000. ✕
12. the Construction Programme and the Energy Programme attracted together 8 % of the female first choice applicants. ✕