This is an enormous topic, but let me try to write at least something. First of all, I do not see any serious direct influence of ideology on math education. Mathematics and physics, of all subjects, were probably the most free of all ideolgical inteference. (To be sure, there was some, at various periods, but very little overall. By the way, this was one reason why many talented people choose mathematics and physics as their careers. These were the areas with most freedom from any ideological inteference).

Everything that follows is mostly based on my own experience (school 1960-70, university 1971-76).

School education in math (and in all sciences) followed a rigid state-approved curriculum, and state approved textbooks (when I say "state" I mean "federal state", Moscow). Primary/secondary education lasted 10 years (age 7-17). There was a math lesson every day in this period. The subjects in the later years were called Algebra, Geometry and Trigonometry. Geometry was taught Euclid-style with complete proofs, including stereometry. Sometimes some basic calculus was included in the last years, like Taylor formula for polynomials.

At the age of 17, you could enter an institute of higher education (approximately analogous to a Western university). But there was an enormous difference with US at this point: you had to choose your speciality at this point. I mean, mathematics, physics, civil engineering, gas and oil, or marine biology etc. So in mathematics there was nothing similar to "undergraduate study" in the US. No Calculus. On the first day of study at the university I was taught the definition of abstract group and Cayley lemma in Algebra, and Dedekind's construction of real numbers in Analysis.

I forgot to mention that to be enrolled you had to pass entrance examination. Written and oral. The competition in the best department (in Moscow) was 7-8 people for one place, in other cities 2-5. Knowledge of school curriculum was tested. For mathematicians the competition was in Math (written and oral), Physics (oral) and language (composition).

In the university you studied for 5 years, first 3 by a rigid curriculum, last two years with many elective courses. Then you pass "state examinations", defend your diploma project, and obtain a degree (usually it is considered roughly equivalent to US master, but in SU it was simply called "diploma"). Besides mathematics courses there were mandatory physics and (separately) mechanics, a lot of Marxism-Leninism courses, physical education and military training (for boys only).

Then you are assigned to a job. Yes, assigned:-) As a high school teacher,

or an engineer, etc. Everyone was given, assighed a job. One had an obligation to work there for at least 3 years. After this you could stay and continue, or to look for another job yourself.

Then there were two higher degrees:

Candidate of Physics and Mathematical science (usually considered comparable to PhD), and

Doctor of Physics and Mathematical sciences (this has no equivalent in the US).

To obtain a candidate degree one had to defend a thesis. One could enroll to graduate study for this (caled "aspirantura", 3 years), or not. 3-5 publications in aproved journals were required. Then public defense. Then approval by a special committee in Moscow.

To become a Doctor, you had to "create a new direction in science", defend another thesis, and also be approved by this committee in Moscow. The committee was a government body, not affiliated with any university. About 1/10 of beople with diploma became Candidates and 1/10 of those eventually became Doctors (very roughly).

One more thing to mention. There was a well organized all-union system of search of talented people. I mean olimpiads first of all, but also mathematical circles and schools by correspondence. And a lot of good books oriented for interested high school children. This tradition continues. And one more thing: all textbooks (and books in general) were were very cheap. University textbooks essentially free. The libraries just had enough of them for all students. I am not mentioning that university education itself was free. If you had good grades, you obtained a small stipend, authomatically, without a competition. Just good grades was enough. All excellent grades would bring you a larger stipend.

Sorry, this message is already too long, and probably out of the scope of the MO.

This question has been deleted; no new answers will be accepted.