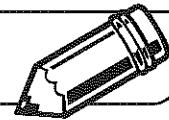


LESSON
5•12
Mathematics Instruction in History


Throughout our nation's history, students have learned mathematics in different ways and have spent their time working on different kinds of problems. This is because people's views of what students can and should learn are constantly changing.

1. *1840s* It was discovered that children could be very good at mental arithmetic, and students began to solve mental arithmetic problems as early as age 4. A school in Connecticut reported that its arithmetic champion could mentally multiply 314,521,325 by 231,452,153 in $5\frac{1}{2}$ minutes.

After studying arithmetic two hours per day for 7 to 9 years, 94% of eighth graders in Boston in 1845 could solve the following problem. Try to solve it.

What is $\frac{1}{2}$ of $\frac{1}{3}$ of 9 hours and 18 minutes?

_____ (unit)

Explain your solution: _____

2. *1870s* Many textbooks were step-by-step guides on how to solve various problems. Students were given problems and answers. They had to show how the rules in the textbook could be used to produce the given answers.

Here is a problem from around 1870 (without the answer) given to students at the end of 6 to 8 years of elementary arithmetic study. Try to solve it.

I was married at the age of 21. If I live 19 years longer, I will have been married 60 years. What is my age now? _____ (unit)

Explain your solution: _____

