

From the SAT Expert: Will Your Son or Daughter Be Ready for Algebra?

It is essential that each student succeed in Math [especially Algebra] because it is so big a segment of the SAT and ACT testing. Algebra questions are more numerous on the SAT and ACT than any other topics. In addition, many school districts require Algebra I for high school graduation. This article will give you some 'milestones' you can check EACH year to be sure your student is on track for Algebra I in 8th or 9th grade.

Certainly programs differ from school to school. Since Algebra is so essential a part of education, in 2008 the US Department of Education's National Mathematics Advisory Panel was given the task of creating a list of benchmarks for the Foundations of Algebra. Those benchmarks indicate that your son or daughter should have the following skills by the completion of each of these grades:

By the end of 3rd Grade

- Work with a Number Line – point to numbers along a number line, draw a number line, use it to demonstrate add and subtract
- Compare whole numbers – say which of two numbers is bigger or smaller
- Know place value of numbers – understand numbers of 2 or more digits
- Add and subtract whole numbers – including 3 or 4 digit numbers

By the End of 4th Grade

- Write and name fractions and decimals
- Represent fractions on a number line
- Compare fractions on a number line
- Use other common representations of fractions and decimals like pie charts

By the End of 5th Grade

- Multiply whole numbers with several digits
- Complete long divisions with whole numbers
- Add and subtract fractions and decimals
- Find perimeter and area of triangles and all quadrilaterals that have at least one pair of parallel sides

By the End of 6th Grade

- Multiply and divide fractions and decimals



- Add, subtract, multiply, and divide using both positive and negative integers
- Compute perimeter and area of 2-dimensional figures, and surface area and volume of 3-dimensional figures using memorized formulas

By the End of 7th Grade

- Add, subtract, multiply, and divide using positive and negative fractions
- Solve problems involving percent and ratio
- Solve rate and proportion problems
- Find unknown lengths, angles, and areas
- Understand similar triangles
- Compute and understand the concept of the slope of a line

If your son or daughter is on track, that's a good thing. Keep practicing. Keep encouraging. Keep supporting. Keep WATCHING!

But what if he or she is not? The reason for this article is to let you see NOW, not after your student struggles with algebra. Talk to the Math teacher for ways to support classroom learning. Talk with your Principal to be sure the program is on-track. And NOW, before he or she stumbles, get whatever help and tutoring your child needs to be confident and prepared for Algebra.

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