

Why Learn Math

henry@collegebound.org

- 1) Fulfill current responsibility.
 - a. tonight's homework
 - b. this term's grade
- 2) Be a smart consumer.
 - a. home loans, school loans, credit card debt
 - b. shopping, life-cycle of expenses, insurance
 - c. business models, taxes, investments, investment schemes
 - d. games, gambling
- 3) Be an intelligent citizen.
 - a. Understand budgets, trends.
 - b. Statistical reasoning applied to health, social sciences.
- 4) Keep opportunity alive.
 - a. accounting, finance, administration
 - b. science, engineering
- 5) Quit from strength, not ignorance.
 - a. Know enough to know what's right for you.
 - b. Have a glimmer of what specialists do.
- 6) Think clearly.
 - a. visualize (e.g., figure at bottom)
 - b. extract the essence, put it in symbols, reason to solution
 - c. proofs and well-run meetings take assessment, planning, execution
- 7) Mindbenders
 - a. objective evaluation, multiple consistent methods, checking
 - b. confidence, satisfaction
 - c. independence, excitement

$$(x + 2)(x + 3) = x^2 + 5x + 6$$

The diagram illustrates the area model for the equation $(x + 2)(x + 3) = x^2 + 5x + 6$. It shows a large rectangle divided into a 2x3 grid of smaller rectangles. The top row consists of a red rectangle labeled x and two yellow rectangles labeled 1 . The bottom row consists of a red rectangle labeled x and two yellow rectangles labeled 1 . The left column consists of a red rectangle labeled x and a yellow rectangle labeled 1 . The right column consists of a red rectangle labeled x and a yellow rectangle labeled 1 . The central area is a blue square labeled x^2 . The total area is the sum of all these rectangles: $x^2 + 5x + 6$.