Mathematica

NEWSLETTER

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THE ROLE OF MATHEMATICS IN ANY CHOSEN CARRIER

Mathematical thinking is important for all members of a modern society as a habit of mind for its use in the workplace, business and finance; and for personal decision-making. Mathematics is fundamental to national prosperity in providing tools for understanding science, engineering, technology and economics. It is essential in public decision-making and for participation in the knowledge economy.

Mathematics is a creative discipline. The language of mathematics is international. The subject transcends cultural boundaries and its importance is universally recognized. Mathematics has developed over time as a means of solving problems and also for its own sake.

Mathematics equips pupils with uniquely powerful ways to describe, analyze and change the world. It can stimulate moment of pleasure and wonder for all pupils when they solve a problem for the first time, discover a more elegant solution, or notice hidden connections. Pupils who are functional in mathematics and financially capable are able to think independently in applied and abstract ways, and can reason, solve problems and assess risk. Students who choose to ignore mathematics, or not take it seriously in High School, forfeit many future careers opportunities that they could have. They essentially turn their backs on more than half the job market. The vast majority of university degrees require Mathematics.

The importance of Mathematics for potential future careers cannot be more emphasized.

For example, degrees in the following areas require good knowledge of Mathematics and Statistics:

- **The physical sciences** (like Chemistry, Physics, Engineering)
- **The life and health sciences** (like Biology, Psychology, Pharmacy, Nursing, Optometry),
- **The social sciences** (including Anthropology Economics, Linguistics, Education, Geography)
- **The tech sciences** (like Computer Science, Networking, Software development),
- **Business and Commerce,**
- **Actuarial science** (used by insurance companies)
- **Medicine**

Every area of Mathematics has its own unique applications to the different career options. For example, Algebra is very important for computer science, cryptology, networking, study of symmetry in Chemistry and Physics. Calculus (including differential equations) is used in Chemistry, Biology, Physics, Engineering, the motion of water (hydrodynamics), rocket science, molecular structure, option price modeling in Business and Economics models, etc.

QUESTION OF THE MONTH

Suppose you are offered two jobs. Job A offers a salary of GMD100, 000 per annum, with increases of GMD4, 000 per annum.

Job B offers the same initial salary of GMD100, 000 per annum, but with increases of GMD1, 000 every six months.

Which should you take? (Send answer to: youthcarefd@yahoo.com)

NEWS: CEMC / YCF/ MoBSE / Science Club of UTG prepare for Summer Mathematics Program (SMP) 2011 in 20 schools.