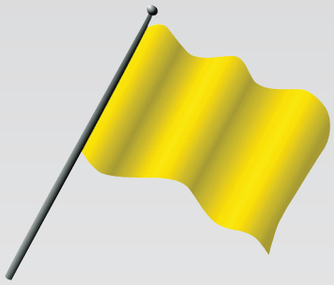
Is your student college ready for mathematics?

Academic evidence in pursuit of STEM (Science, Technology, Engineering, & Math) degrees

CALCULUS

(*Freshman college credit course)

MARGINALLY PREPARED



Math Learning:
- Eight credits college bound level math and Statistics without repeating a course
- Algebra I, II, Geometry (or Integrated), and Pre-Calculus
- Statistics (one semester)
- Success trend: 80 - 90 percent

Standardized Test Scores:
- SAT composite score: 1000 - 1199
- ACT composite score: 20 - 25
- PASS ECA Core 40

Working Knowledge of:
- Fractional operations calculator free
- Like terms; polynomial operations
- Exponent rules
- Problem solving
- Solving equations (linear, systems of equations 2x2, 3x3)
- Plane graphing (linear equations, systems, and solving)

Familiar with:
- Logarithms
- Simplifying radicals
- Factoring
- Special triangles
- Pythagorean theorem
- Unit circle trigonometry (trigonometric equations/identities/properties)
- Solving equations (quadratic, exponential, domain, and range)
- Plane graphing (inequalities, even/odd functions (end behavior/asymptotes)), transformations of special cases (absolute value, conics, exponential, logarithmic, quadratic, radical, cubic, rational - $\frac{1}{x}$ and $\frac{1}{x^2}$)

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PREPARED

Math Learning:
- Ten credits college bound level math including two AP or dual credits without repeating a course
- Algebra I, II, Geometry (or Integrated), Pre-Calculus, and Calculus
- Statistics (two semesters)
- Success trend: 90 percent or higher

Standardized Test Scores:
- SAT composite score: 1200 - 1600
- ACT composite score: 26 - 36
- PASS ECA Core 40

Confident Knowledge of:
- Fractional operations calculator free
- Radical applications
- Polynomial operations
- Logarithm applications
- Factoring applications
- Exponent rule applications
- Special triangle applications
- Pythagorean theorem applications
- Unit circle trigonometry applications (trigonometric equations/identities/properties)
- Theoretical limits
- Sequences and Series
- Solving equations and applications (quadratic, exponential, domain, and range, systems of equations 2x2, 3x3 - special case solutions)
- Problem solving applications
- Plane graphing (linear equations/programming, inequalities, systems (2x2, 3x3), even/odd functions, (end behavior/asymptotes), transformations of special cases and graph analysis (absolute value inequality graphs, conics, exponential, logarithmic, polynomial, radical, cubic, rational—all types)

*CHECK WITH COLLEGE PROGRAM

Southeast Indiana Postsecondary Regional Partnership (www.iupuc.edu/ctl/collegereadiness) 2016