**Maths (Advocate: Thiago Viana)**

**Calculate the greatest common divisor and least common multiple of a given pair of numbers.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  <https://github.com/RyanEdwards1/Maths/blob/master/README.md#how-to-calculate-the-greatest-common-divisor-and-least-common-multiple-of-a-given-pair-of-numbers> |
| This link takes you to How to calculate the greatest common divisor and the least common multiple |

**Use relevant theory to sum arithmetic and geometric progressions.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  <https://github.com/RyanEdwards1/Maths/blob/master/README.md#arithmetic-and-geometric-progressions> |
| This link takes you to some example code for arithmetic and geometric progressions |

**Deduce the conditional probability of different events occurring within independent trials.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  Probability theory power point |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Identify the expectation of an event occurring from a discrete, random variable.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  PDF document that explains it on Its learning |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Identify simple shapes using co-ordinate geometry.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  Find code or research it |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Determine shape parameters using appropriate vector methods.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Determine the rate of change within an algebraic function.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Use integral calculus to solve practical problems involving area.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  Research on google |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Identify multiplicative inverses in modular arithmetic.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Calculate probabilities within both binomially distributed and normally distributed random variables.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Evaluate the coordinate system used in programming a simple output device.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  Coordinates in project 1 |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Analyse maxima and minima of increasing and decreasing functions using higher order derivatives.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Produce a detailed written explanation of the importance of prime numbers within the field of computing.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Evaluate probability theory to an example involving hashing and load balancing.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Construct the scaling of simple shapes that are described by vector coordinates.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Justify, by further differentiation, that a value is a minimum.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links #  N/A - Yet to do |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |