**Maths (Advocate: Thiago Viana)**

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

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| Link: <https://github.com/LukeShead/Probability-and-Mathematic-Expressions> |
| 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 relevant theory to sum arithmetic and geometric progressions.**

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| 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 |
| TO DO |

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

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| <https://github.com/LukeShead/Probability-and-Mathematic-Expressions> |
| Examples of events with probability |

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

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| <https://github.com/LukeShead/Probability-and-Mathematic-Expressions> |
| To add more evidence in repo |

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

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| 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 |
| TO DO, |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO |

**Identify multiplicative inverses in modular arithmetic.**

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| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| <https://github.com/LukeShead/Project-01> |
| In this repository, I explain how I was able to make an NPC follow certain coordinates of a user’s mouse, this justifies the criteria as the project uses coordinates to run therefore is a correct system for the criteria. |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |

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

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| 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 |
| TO DO (you can leave it blank now, we are going to address this in future sessions) |