Year 12 Essential Practical Applications marking rubric

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|  | A marks | B | C | D |
| Interpret the task and gather the key information | Identifies relevant information from multiple sources or within concentrated sources. | Identifies and links more than one piece of information. | Identifies relevant information and chooses the appropriate mathematics to solve a problem in straightforward or familiar situations. | Identifies some relevant information in straightforward or familiar situations. |
|  | A | B | C | D |
| identify the mathematics which could help to complete the task | Chooses the appropriate mathematical techniques to solve a range of problems in unstructured situations. | Chooses the appropriate mathematical and techniques to solve problems in mostly familiar and sometimes unstructured situations. | Plans the solution of real problems in Practical applications when an overview of the mathematical thinking process has been provided. | Sometimes chooses the appropriate mathematics to solve a problem in straightforward or familiar situations. |
|  | A | B | C | D |
| analyse information and data from a variety of sources | Incorporates information from multiple sources and demonstrates a systematic approach to accurately solve multi-step problems, including those from unfamiliar situations. | Applies information and calculates mostly accurate solutions for multi-step problems. | Applies information and calculates mostly accurate solutions for problems in familiar situations involving one or more steps. | Applies information and calculates some accurate solutions for routine and practised problems with one or more steps. |
|  | A | B | C | D |
| apply existing mathematical knowledge and strategies to obtain a solution. | Modifies calculated results or conclusions when conditions are changed. | Applies appropriate graphing techniques and determines appropriate scales based on the data.  Incorporates some changed conditions when solving problems in familiar situations. | Applies appropriate graphing echniques.  Rounds to an appropriate level for everyday contexts. | Uses appropriate graphing techniques with support. |
|  | A | B | C | D |
| verify the reasonableness of the solution | Verifies the reasonableness of solutions and makes adjustments when necessary. | Checks calculated results and makes adjustments where necessary. | Seldom checks results in the light of the original problem. | Rarely, checks results. |
|  | A | B | C | D |
| communicate findings in a systematic and concise manner. | Uses accurate mathematical language and expressions to communicate methods and solutions to multi-step problems.  Accesses a comprehensive range of mathematical concepts to validate conclusions which are related to the original question or context. | Accesses a range of mathematical concepts to communicate solutions and justify conclusions which relate to the original question or context, including for some non-routine problems. | Shows working, including intermediate steps and/or expressions entered into a calculator or spreadsheet.  Provides short statements based on straightforward observations which are related to the original question or context | Shows limited working, including some intermediate steps and/or expressions entered into a calculator or spreadsheet.  Provides short statements which may not be related to the original question or context. |