This section contains examples of explorations written by teachers, students and others involved in the development of the new internal assessment. Many of them were written before the criteria were finalized, and were used in refining the criteria. It should also be noted that they were not written under the conditions expected and outlined in the guides and in earlier sections of this document. In particular, there was no teacher support and discussions, and no opportunities for feedback. Despite that, some of the explorations do exemplify excellent work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Title** | **# Pages** | **Mark** | **Notes (modeling, Inv, topic.)** |
| [**Example 1**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D3.html) | Breaking the code | 10 | 15 | Explaining w Math. Cryptography (different kinds)  |
| [**Example 2**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D4.html) | Euler’s totient theorem | 7 | 16 | Proof ??? of Fermat’s Little Theorem and Euler Totient Theor. |
| [**Example 3**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D5.html) | Minesweeper | 7 | 5 | Investigation (Game) |
| [**Example 4**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D6.html) | Modelling musical chords | 10 | 9 | Model (Trig) |
| [**Example 5**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D7.html) | Newton–Raphson | 8 | 11 | A method for approximating roots |
| [**Example 6**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D8.html) | Florence Nightingale | 12 | 20 | Stats – ways of showing data (Polar Area diagrams) |
| [**Example 7**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D9.html) | Modelling rainfall | 14 | 16 | Model (Polynomial). Integral Calculus – quite complex! |
| [**Example 8**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D10.html) | Spirals in Nature | 8 | 16 |  |
| [**Example 9**](http://xmltwo.ibo.org/publications/DP/Group5/d_5_matsl_tsm_1205_1/html/content/exist/rest/app/tsm.xql%40doc%3Dd_5_matsl_tsm_1205_1_e%26part%3D2%26chapter%3D11.html) | Tower of Hanoi | 11 | 14 |  |

Notes:

**Start with:** Example 6. An example of a perfect score on an Exploration. Only 12 pages, and easy to read.

**Grade together**

Example 4 – Trig is accessible and it’s short 10 pages