**PARALLEL QUESTIONS FROM THE 2013 NCEA EXAMINATIONS**

ALGEBRA

ACHIEVEMENT

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| --- | --- |
| 1a Factorise  ***8x2 + 10x – 3*** | 1b Solve  ***8x2 + 10x – 3 = 0*** |
| 2a Simplify  (5b3)2  (2b5)4 | 2b Simplify  **¼**  81c8  16d12 |
| 3a Solve  Log (32) = 5  ***x*** | 3b If $2000 is invested at 8% interest, then the final amount A in n years is given by A = 2000×(1.08)n  Find A if n= 6 years |

**PARALLEL QUESTIONS FROM THE 2013 NCEA EXAMINATIONS**

ALGEBRA

MERIT

|  |  |
| --- | --- |
| 1c Simplify FULLY  ***5x2 – 45***  ***x2 + x – 12*** | 1d  Solve ***(x + 1) – 2√(x + 1) – 8 = 0***  ***HINT let b2 = (x + 1)*** |
| 2c Simplify    (c6) **½**× (c12) **⅓** | 2d  Phil thinks of a number  He squares it  Then adds 5 times the original number The answer is 66  Form an equation and solve it to find his number. |
| 3c Solve  ***5(x + 4) = 6×3x*** | 3d If $2000 is invested at 8% interest, then the final amount A in n years is given by A = 2000×(1.08)n  When will the amount A be greater than $6000? |