***Excellence Revision 2014***

1. Find the range of values of ***p*** for which the equation

***x + 4 = 2 √(x + p)*** has two distinct real solutions.

2. Find the equation whose roots are 4 times those of

***x2 + 6x + 12 = 0***

***3.*** Solve the following equation for ***x*** in terms of ***k*** where ***k > 0***

 ***ln(3x – 2) – ln(x – 5) = 2ln(k)***

***4.*** Solve the following equation to find an expression for ***x*** in

 terms of ***p***: ***.***

5. Solve the equation for ***x***in terms of***p***: ***3(x – p) = 2(x + p)***

***6.*** Solve for ***x*** *in terms of* ***t***:

 ***log(x + 4) – log(x) = log(t)***

7. Solve the following equation to find an expression for ***x*** in terms of ***b:***

 ***b√(x – b) = √(x + 2b)***  (There is no need to check the validity of your answer.)

***8.*** Solve the following equation for ***x*** in terms of ***c :***

 ***2 (x + 3) = 3 cx***

**9**. Solve for ***x*** in terms of ***a*** and ***b***

 ***a(x + 2) = b(x – 3)***