GENMATHS RESOURCES

SOLVING QUADRATICS BY FACTORISING

Task 1 – Solve the following quadratics through factorisation.

1) $x^2 + 5x + 6 = 0$

2) $y^2 + 6y + 5 = 0$

3) $b^2 + 7b + 12 = 0$

4) $x^2 + 9x + 14 = 0$

5) $k^2 - 4k + 4 = 0$

6) $a^2 + a - 72 = 0$

7) $c^2 - 3c - 28 = 0$

8) $n^2 - 10n + 24 = 0$

9) $u^2 + 8u + 16 = 0$

10) $t^2 - 2t - 8 = 0$

11) $f^2 + 16f + 63 = 0$

12) $p^2 - 81 = 0$

13) $m^2 - 100 = 0$

14) $m^2 - 16 = 0$

15) $x^2 - 2x = 0$

16) $u^2 + 6u = 0$

17) $2x^2 + 7x + 6 = 0$

18) $2y^2 + 9y + 4 = 0$

19) $3l^2 + 13l + 4 = 0$

20) $4x^2 + 39x + 56 = 0$

21) $2k^2 - 13k + 18 = 0$

22) $5a^2 - 2a - 3 = 0$

23) $100y^2 - 81 = 0$

24) $16n^2 - 121 = 0$

25) $9m^2 - 25 = 0$

26) $5v^2 + 20v = 0$

27) $2y^2 - 4y = 0$

28) $3y^2 - 9y = 0$

Challenge – Solve the following equations by factorising.

29) $p^4 - 9p^2 = 0$

30) $r^7 - 64r^5 = 0$

31) $2w^5 - 162w^3 = 0$

32) $64y^4 - 1600y^2 = 0$