Higher Maths question bank :: Paper 1

17. Completing the square

1. Express $2x^2 + 12x + 23$ in the form $p(x + q)^2 + r$.

2. Express $2x^2 + 4x + 3$ in the form $p(x + q)^2 + r$.

3. Express $2x^2 + 16x + 31$ in the form $p(x + q)^2 + r$.

4. Express $3x^2 - 12x + 17$ in the form $p(x + q)^2 + r$.

5. Express $-3x^2 - 12x - 8$ in the form $p(x + q)^2 + r$.

6. Express $2x^2 + 28x + 94$ in the form $p(x + q)^2 + r$.

7. Express $-3x^2 - 36x + 92$ in the form $p(x + q)^2 + r$.

8. Express $3x^2 + 30x + 95$ in the form $p(x + q)^2 + r$.

9. Express $2x^2 - 40x + 180$ in the form $p(x + q)^2 + r$.

10. Express $7x^2 - 14x + 27$ in the form $p(x + q)^2 + r$.