Name: _____ 5-a-day Further Maths

17th September

Corbettmaths

The first 5 terms of a quadratic sequence are 27 30 29 24 15 Find an expression for the nth term	
Prove that when two consecutive integers are squared, that the difference is equal to the sum of the two consecutive integers.	
Use factor theorem to show $(x+3)$ is a factor of $x^3 - x^2 - 44x - 96$	
Solve $x^3 - x^2 - 44x - 96 = 0$	
$y = 4x^3 - 5x^2 + 8x - 1$ Work out the value of $\frac{d^2y}{dx^2}$ when $x = 2$	