

A shaggy dog story

The quick brown fox jumps over the lazy dog. During the jump, the position of his centre of mass is given by $x = ut$, $y = vt - \frac{1}{2}gt^2$, and so describes the parabola $y = (v/u)x - (g/2u^2)x^2$.

Meanwhile, the dog is lazy but she is not idle. She is contemplating a proof strategy for showing that, if $\zeta(\sigma + it) = 0$, where ζ is the analytic continuation to the whole complex plane of the function given by $\zeta(s) = \sum_{n=0}^{\infty} \frac{1}{n^s}$ for $\Re s > 1$, σ and t are real, and $t \neq 0$, then $\sigma = \frac{1}{2}$.