23rd May

Corbettmaths

Factorise fully
$(y+5)^4-(y+5)^3(y-1)$

Do not attempt to expand brackets.

The nth term of a sequence is $\frac{7n^2+5}{2n^2-1}$

Find the limiting value of $\frac{7n^2+5}{2n^2-1}$ as $n \to \infty$

Solve

$5sin\theta = cos\theta$ for $0° \leq \theta \leq 360°$

The line l is a tangent to the circle $(x-5)^2+(y+12)^2=61$ at the point P.

P is the point (10, −6)

Work out the equation of the line l