

Question 9

The product operator \prod , is defined as

$$\prod_{i=1}^k [u_i] = u_1 \times u_2 \times u_3 \times u_4 \times \dots \times u_{k-1} \times u_k.$$

Evaluate, showing a clear method

$$\prod_{r=2}^{\infty} \left[\frac{r^3 - 1}{r^3 + 1} \right].$$