

Question 7

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

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