

7.

$$S = 1 + \frac{3}{5} + \frac{3 \times 4}{5 \times 10} + \frac{3 \times 4 \times 5}{5 \times 10 \times 15} + \frac{3 \times 4 \times 5 \times 6}{5 \times 10 \times 15 \times 20} + \dots$$

By considering a suitable binomial series, or otherwise, find the sum to infinity of S .

(5)