Name	ID	Sr

Q1)(5points) Find the area of the surface generated by revolving the curve

$$y = \sqrt{x + 1} \quad , 0 \le x \le 3$$

about the $x-$axis

Q2)(5points) Determine whether the **sequence** converges or diverges. If it converges, find the limit

$$a_n = n \tan(3/n)$$

Q3) (5points) Determine whether the series converges or diverges. If it converges, find its sum

$$\sum_{n=1}^{\infty} \left(\cos\frac{1}{n} - \cos\frac{1}{(n+1)^2} \right)$$