## Quiz 8

Time:15min

**1.** Find

$$\int_{1}^{3} \frac{dx}{(x-1)^{1/3}}.$$

2. Find an explicit formula for the general term of the sequence

$$\frac{1}{2}$$
,  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{4}{5}$ ,...

and determine whether or not it converges.

Each part is worth 5 points.