

$$4.3) \quad S_n\left(\frac{s}{3}\right) = \frac{2 \cdot 1}{\left(\frac{s}{3}\right) + \frac{1-(s/3)}{n}} \quad \frac{2}{s+1-s}$$

$$= \frac{1}{\left(\frac{sn+3-s}{3n}\right)}$$

$$= \frac{3n}{sn+3-s} = \frac{2}{\left(\frac{sn+1-s}{n}\right)} = \frac{2n}{sn+1-s}$$

$$3sn^2+3n-3sn = 2sn^2+6n-2sn$$

$$sn^2-3n-sn=0$$

$$sn^2-(3+s)n=0$$

$$n(sn-(3+s))=0 \quad n \neq 0$$

$$sn-(3+s)=0$$

$$n = \frac{3+s}{s}$$

$$sn = 3+s$$

$$-3 = s-sn$$

$$\therefore s = \frac{3}{n-1}, \quad n > 3$$