

مسئله و جواب

$$\sqrt[n]{n+1} \sqrt[n]{\frac{1}{n}} = \sqrt[n]{\frac{n+1}{n}} = \sqrt[n]{1 + \frac{1}{n}}$$

$$1 - \frac{1}{n} = \sqrt[n]{1 + \frac{1}{n}} \leftarrow \frac{1}{n} + 1 = n \sqrt[n]{1 + \frac{1}{n}} \leftarrow \frac{1}{n} = \frac{n \sqrt[n]{1 + \frac{1}{n}} - 1}{n}$$

$$\sqrt[n]{1 + \frac{1}{n}} = \frac{1}{n} + \frac{1}{n} \sqrt[n]{1 + \frac{1}{n}} \leftarrow \frac{1}{n} = \frac{1}{n} \left(1 + \sqrt[n]{1 + \frac{1}{n}} \right) \leftarrow 1 = 1 + \sqrt[n]{1 + \frac{1}{n}}$$

$$c_{11} = \frac{1}{n} \left(1 + \sqrt[n]{1 + \frac{1}{n}} \right) \leftarrow c_{11} = \frac{1}{n} + \frac{1}{n} \sqrt[n]{1 + \frac{1}{n}}$$

$$c_{11} = (1 - \frac{1}{n} \sqrt[n]{1 + \frac{1}{n}}) - (c_{11} - c_{11}) =$$

$$c_{11} = \frac{1}{n} \left(\frac{1}{1 + \frac{1}{n}} \right) = \frac{1}{n+1}$$

د (1) = 1 منقطة
د (2) = 1 منقطة
د (3) = 10

$$c + 0 + p = v = (1) \text{ د } \quad c + 0 + 0 + p = (n) \text{ د}$$

$$c + 1 + p \times 2 = 10 = (c) \text{ د}$$

$$1 = p \rightarrow p = p \rightarrow 0 + p \times 2 = 1$$

$$c + 0 + p = v \rightarrow 1 = 0 \rightarrow c + 0 + 1 = v$$

$$1 + 0 + 0 + c = (n) \text{ د}$$

$$c + (1 + 0 + c) = (n) \text{ د}$$

$$\frac{1}{n} - \frac{1}{n} + \frac{1}{n} + \frac{1}{n} = \frac{1}{n} \rightarrow \frac{1}{n} = \frac{1}{n} \rightarrow c + 1 + \frac{1}{n} + \frac{1}{n} = 1$$

