$$\sum_{n=2}^{\infty} \frac{n^2+n}{n^5-n} < \frac{1}{n^2}$$

$$\frac{\frac{1}{n^3}}{\frac{n^2+n}{n^5-n}} = \frac{(n^5-n)\cdot 1}{n^3(n^2+n)} = \frac{n^5-n}{n^5+n^4}$$

$$\frac{1-\frac{1}{n^4}}{1+\frac{1}{n}} \longrightarrow 1$$

66 $\displaystyle\sum_{n=1} \frac{2+(-1)^n}{n} = \frac{1}{1} + \frac{3}{2} + \frac{1}{3} + \frac{3}{4}$

69 $\displaystyle\sum_{n=1} \frac{2n+1}{4^n} = \sum \frac{2n}{4^n} + \sum \frac{1}{4^n}$

$\frac{2n}{4^n}$: $\frac{2}{4} + \frac{4}{16} + \frac{6}{64} + \frac{8}{256} + \frac{10}{1024} + \frac{12}{4096} + \frac{14}{16,001}$

$\frac{1}{2^n}$: $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64} + \frac{1}{128}$

81 $\quad 1700 + \int_0^3 2000 e^{0.23t} \, dt$

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