

SOME NICE COMPUTATIONS THE MHS SOFTWARE CAN DO

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$$\begin{aligned} &\sum_{p-1 \geq n > m \geq 3} \frac{p+m}{n(m-2)} \equiv -\frac{13}{4} - \frac{31}{4} + 4\zeta_p(3) \pmod{p^2}. \\ &\sum_{p-1 \geq n \geq m \geq 3} \frac{p+m}{n(m-2)} \equiv -2 - (5 + 4\zeta_p(3))p - 12\zeta_p(3)p^2 \pmod{p^3}. \\ &\sum_{n=1}^{\infty} H_n(1,1) \sum_{m=1}^{\infty} \frac{m+p+2}{p} \frac{1}{m^3} \equiv -\frac{1}{8} - \frac{17}{16}p + \frac{9}{2}p^2 \zeta_p(3) - 11p^3 \zeta_p(5) \pmod{p^2}. \\ &\sum_{n=0}^{\infty} \frac{p^4}{n} \equiv 2 - 16p^5 \zeta_p(5) - 20p^6 \zeta_p(3)^2 - 143p^7 \zeta_p(7) + O(p^8) \end{aligned}$$

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