

拉马努金的公式

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$$\frac{1}{\pi} = \frac{1}{8} \sum_{m=0}^{\infty} (20m+3) \frac{(-1)^m (4m)!}{(4\sqrt{2})^{4m} (m!)^4} \quad (1)$$

$$\frac{1}{\pi} = \frac{1}{2\sqrt{3}} \sum_{m=0}^{\infty} (8m+1) \frac{(4m)!}{(4\sqrt{3})^{4m} (m!)^4} \quad (2)$$

$$\frac{1}{\pi} = \frac{\sqrt{3}}{16} \sum_{m=0}^{\infty} (28m+3) \frac{(-1)^m (4m)!}{(64\sqrt{3})^{2m} (m!)^4} \quad (3)$$

$$\frac{1}{\pi} = \frac{2\sqrt{2}}{9} \sum_{m=0}^{\infty} (10m+1) \frac{(4m)!}{12^{4m} (m!)^4} \quad (4)$$

$$\frac{1}{\pi} = \frac{1}{72} \sum_{m=0}^{\infty} (260m+23) \frac{(-1)^m (4m)!}{(12\sqrt{2})^{4m} (m!)^4} \quad (5)$$

$$\frac{1}{\pi} = \frac{3\sqrt{3}}{49} \sum_{m=0}^{\infty} (40m+3) \frac{(4m)!}{28^{4m} (m!)^4} \quad (6)$$

$$\frac{1}{\pi} = \frac{1}{18\sqrt{11}} \sum_{m=0}^{\infty} (280m+19) \frac{(4m)!}{(12\sqrt{11})^{4m} (m!)^4} \quad (7)$$

$$\frac{1}{\pi} = \frac{\sqrt{5}}{288} \sum_{m=0}^{\infty} (644m + 41) \frac{(-1)^m (4m)!}{(1152\sqrt{5})^{2m} (m!)^4} \quad (8)$$

$$\frac{1}{\pi} = \frac{2}{84^2} \sum_{m=0}^{\infty} (21460m + 1123) \frac{(-1)^m (4m)!}{(84\sqrt{2})^{4m} (m!)^4} \quad (9)$$

$$\frac{1}{\pi} = \frac{2\sqrt{2}}{99^2} \sum_{m=0}^{\infty} (26390m + 1103) \frac{(4m)!}{396^{4m} (m!)^4} \quad (10)$$

$$\frac{1}{\pi} = \frac{1}{9\sqrt{7}} \sum_{m=0}^{\infty} (65m + 8) \frac{(4m)!}{(-63^2)^m (m!)^4} \quad (11)$$

$$\frac{1}{\pi} = \frac{1}{9} \sum_{m=0}^{\infty} (14m + 2) \frac{(4m)!}{648^m (m!)^4} \quad (12)$$

$$\frac{1}{\pi} = \frac{1}{1760\sqrt{330}} \sum_{m=0}^{\infty} \frac{(-1)^n (6m)! (261702m + 10177)}{5280^{3m} (3m)! (m!)^3} \quad (13)$$

$$\frac{1}{\pi} = \sum_{m=0}^{\infty} \frac{(-1)^m (6m)! (6541681608m + 163096908)}{(3m)! (m!)^3 (262537412640768000)^{m+\frac{1}{2}}} \quad (14)$$