Ramanujan-type formulas for $\frac{1}{\pi}$

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Abstract:

In a paper 1914 S. Ramanujan stated 17 formulas for $\frac{1}{\pi}$, of which we give one example:

$$\sum_{n=0}^{\infty}(1+8n)\frac{(1/4)_n(1/2)_n(3/4)_n}{(n!)^3}\frac{1}{9^n} = \frac{2\sqrt{3}}{\pi}.$$

Here $(a)_n$ denotes the Pochhammer symbol

$$(a)_n = a(a+1)\cdots(a+n-1).$$

We present results of Z.-W. Sun, and G.Almkvist, A.Aycock concerning generalizations of Ramanujan's formulas.