

***** Mathematical Weekly *****
(Week 24)

What can you do with three 9s ?

$$\begin{aligned}\left(\frac{9}{9}\right)^9 &= 1 \\ \frac{9+9}{9} &= 2 \\ \sqrt{9}+9-9 &= 3 \\ \frac{9}{9}+\sqrt{9} &= 4 \\ (\sqrt{9})!-\frac{9}{9} &= 5 \\ 9-\frac{9}{\sqrt{9}} &= 6 \\ (\sqrt{9})!+\frac{9}{9} &= 7 \\ 9-\frac{9}{9} &= 8 \\ 9^{9/9} &= 9 \\ 9+\frac{9}{9} &= 10 \\ \frac{99}{9} &= 11 \\ 9+\frac{9}{\sqrt{9}} &= 12 \\ \dots &\dots \dots\end{aligned}$$