RB's Ten Favorite Math Formula
How Many Can **YOU** Identify?

(x)

$$F_n = \sum_{k=0}^{n} \binom{n-k}{k}$$

(ix)

$$W \equiv k + \lfloor 2.6m - .2 \rfloor - 2C + Y + \left\lfloor \frac{Y}{4} \right\rfloor + \left\lfloor \frac{C}{4} \right\rfloor \pmod 7$$

(viii)

$$f_{n,k} = \binom{n}{k} 2^{n-k}$$

(vii)

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \sqrt{\pi}$$

(vi)

$$V - E + F = 2$$

(v)

$$M_n = 2n! \sum_{k=0}^{n} (-1)^k \frac{2n}{2n-k} \binom{2n-k}{k} (n-k)!$$

(iv)

$$\sum_{n=1}^{\infty} \frac{1}{n^s} = \prod_{p \text{ prime}} \frac{1}{1-p^{-s}}$$

(iii)

$$\prod_{i=1}^{\infty} (1 + x^i) = \prod_{i=1}^{\infty} \left(\frac{1}{1 - x^{2i-1}} \right)$$

(ii)

$$\left(\frac{m}{n}\right) \left(\frac{n}{m}\right) = (-1)^{(m-1)(n-1)/4}$$

(i)

$$e^{i\pi} + 1 = 0$$