C. $\left[\dfrac{n(n+1)}{2}\right]^3$ D. $\dfrac{n(n+1)(2n+1)}{3}$

(x) An infinite Geometric series converges only if:

A. $r = -1$ B. $r = 1$

C. $|r| > 1$ D. $|r| < 1$

(xi) An event E is said to be sure if:

A. $P(E) = \infty$ B. $P(E) = 0$

C. $P(E) = 1$ D. $P(E) = -1$

(xii) Numbers of terms in the expansion of $(a + b)^n$ is:

A. $n^2 + 1$ B. $n + 1$

C. $n - 1$ D. n

(xiii) The sum of odd coefficients in the expansion of $(1 + x)^n$ is:

A. 2^{n+1} B. n^2

C. 2^n D. 2^{n-1}

(xiv) $\tan\left(\dfrac{3\pi}{2} - \theta\right) =$

A. $-\cot\theta$ B. $\tan\theta$

C. $-\tan\theta$ D. $\cot\theta$

(xv) If $\cot\theta < 0$ and if $\cot\theta > 0$, then the terminal arm of angle lies in the quadrant:

A. IV B. I

C. II D. III

(xvi) $\sin 3\alpha =$

A. $4\sin\alpha - 3\sin^3\alpha$

B. $4\cos^3\alpha - 3\cos\alpha$

C. $3\cos^3\alpha - 4\cos\alpha$

D. $3\sin\alpha - 4\sin^3\alpha$

(xvii) The period of $3\sin 3x$ is:

A. 6π B. $\dfrac{\pi}{3}$

C. $\dfrac{\pi}{2}$ D. $\dfrac{2\pi}{3}$

The range of $\cot x$ is:

A. R B. R

C. $-1, 1]$ D. R^+

passing through the vertices

is called:

B. Circum circle

Escribed circle

cipal cosine