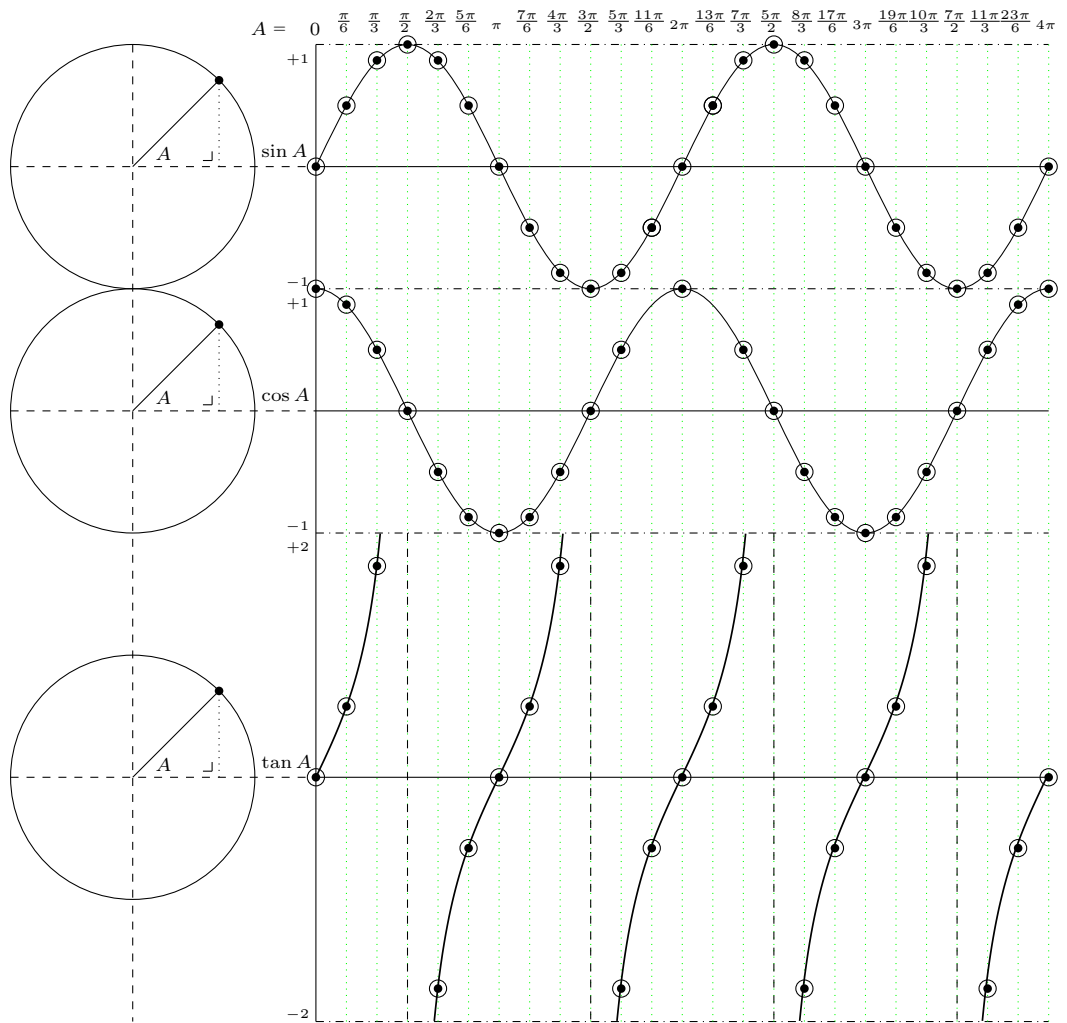


SOLUTIONS:

- (i) $\sin 0 = 0$ (ii) $\sin \frac{\pi}{2} = 1$ (iii) $\sin \pi = 0$ (iv) $\sin \frac{3\pi}{2} = -1$ (v) $\sin 2\pi = 0$
 (vi) $\cos 0 = 1$ (vii) $\cos \frac{\pi}{2} = 0$ (viii) $\cos \pi = -1$ (ix) $\cos \frac{3\pi}{2} = 0$ (x) $\cos 2\pi = 1$
 (xi) $\tan 0 = 0$ (xii)ⁱ $\tan \frac{\pi}{2} = \frac{1}{0}$ (xiii) $\tan \pi = 0$ (xiv)* $\tan \frac{3\pi}{2} = \frac{-1}{0}$ (xv) $\tan 2\pi = 0$



^{i*} Note: for $\tan 90^\circ$ and $\tan 270^\circ$, above, we cannot represent a division-by-zero ‘value’ on the ‘codomain’ (y -axis), so we draw ‘asymptotes’, represented by the vertical dashed lines on the graph. Anyway, $\tan 90^\circ$, $\tan 270^\circ$, $\tan 450^\circ$, etc., do not exist on the ‘domain’, i.e. they are not ‘elements’ of the set of the ‘domain’ (A -axis.) We can say that generally for all “ $\tan(90^\circ + m(180^\circ))$ ”, where $m \in \mathbb{Z}$. Better to write this in radians i.e. for all $A = \frac{\pi}{2} + m\pi$, where $m \in \mathbb{Z}$.

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