

01. Nilai dari $120^\circ = \dots$

- A. $\frac{1}{5}\pi$ radian D. $\frac{3}{5}\pi$ radian
B. $\frac{1}{3}\pi$ radian E. $\frac{2}{3}\pi$ radian
C. $\frac{2}{5}\pi$ radian

02. Diketahui $\cos A = \frac{2}{5}\sqrt{5}$ dengan sudut A lancip. Nilai $\tan A$ adalah ...

- A. $\frac{1}{3}$ C. $\frac{1}{5}\sqrt{5}$ E. $3\sqrt{5}$
B. $\frac{1}{2}$ D. $2\sqrt{5}$

03. Bila $0^\circ < a < 90^\circ$ dan $\tan a^\circ = \frac{5}{\sqrt{11}}$, maka $\sin a^\circ = \dots$

- A. $\frac{5}{6}$ C. $\frac{1}{6\sqrt{11}}$ E. $\frac{1}{6\sqrt{11}}$
B. $\frac{25}{36}$ D. $\frac{5}{36}$

04. Diketahui $\tan A = \frac{3}{4}$ dengan sudut lancip. Nilai $2 \cos A = \dots$

- A. $\frac{6}{5}$ C. $\frac{5}{4}$ E. $\frac{5}{3}$
B. $\frac{8}{5}$ D. $\frac{4}{5}$

05. Jika $\sin A = \frac{3}{5}$, A sudut pada kuadran II, maka $\cos A = \dots$

- A. -1 C. 0 E. 1
B. $-\frac{4}{5}$ D. $\frac{4}{5}$

06. Jika $\cos \beta = -\frac{1}{2}\sqrt{3}$ dan sudut β terletak pada kuadran II, maka $\tan \beta = \dots$

- A. $\sqrt{3}$ C. $\frac{1}{2}$ E. $-\sqrt{3}$
B. $\frac{1}{3}\sqrt{3}$ D. $-\frac{1}{3}\sqrt{3}$

07. Jika x di kuadran II, dan $\tan x = a$, maka $\sin x = \dots$

- A. $\frac{a}{\sqrt{1+a^2}}$ D. $\frac{1}{a\sqrt{1+a^2}}$
B. $-\frac{a}{\sqrt{1+a^2}}$ E. $-\frac{a\sqrt{1+a^2}}{a}$
C. $\frac{1}{\sqrt{1+a^2}}$

08. Nilai $\cos 1110^\circ$ adalah ...

- A. $\sqrt{3}$ C. $-\sqrt{3}$ E. $\frac{1}{2}$
B. $\frac{1}{2}\sqrt{3}$ D. $-\frac{1}{2}\sqrt{3}$

09. Nilai dari $\sin 1020^\circ = \dots$

- A. -1 C. $-\frac{1}{2}$ E. $\frac{1}{2}\sqrt{3}$
B. $-\frac{1}{2}\sqrt{3}$ D. $\frac{1}{2}$

10. Nilai $\sin 240^\circ + \sin 225^\circ + \cos 315^\circ$ adalah ...

- A. $-\sqrt{3}$ C. $-\frac{1}{2}$ E. $\frac{\sqrt{3}}{3}$
B. $-\frac{\sqrt{3}}{2}$ D. $\frac{\sqrt{3}}{2}$

11. Nilai dari $\frac{\sin 30^\circ + \cos 330^\circ + \sin 150^\circ}{\tan 45^\circ + \cos 210^\circ} = \dots$

- A. $\frac{1+\sqrt{3}}{1-\sqrt{3}}$ C. $\frac{2-\sqrt{3}}{2+\sqrt{3}}$ E. $\frac{1+2\sqrt{3}}{1-2\sqrt{3}}$
B. $\frac{1-\sqrt{3}}{1+\sqrt{3}}$ D. $\frac{2+\sqrt{3}}{2-\sqrt{3}}$

12. $\frac{\sin 270^\circ \cdot \cos 135^\circ - \tan 135^\circ}{\sin 150^\circ \cdot \cos 225^\circ} = \dots$

- A. $-(2+2\sqrt{2})$ C. $\frac{1}{2}$ E. 2
B. $-\frac{1}{2}$ D. 1

13. $\frac{\sin^2 45^\circ \sin^2 60^\circ + \cos^2 45^\circ \cos^2 60^\circ}{\tan 30^\circ \cdot \tan 60^\circ} = \dots$

- A. $\frac{1}{4}$ C. 1 E. 2
B. $\frac{1}{2}$ D. $\frac{3}{2}$

14. $\cos^2 30^\circ - \sin^2 135^\circ + 8 \sin 45^\circ \cos 135^\circ = \dots$

- A. $-4\frac{1}{4}$ C. $4\frac{1}{4}$ E. $3\frac{3}{4}$
B. $-3\frac{3}{4}$ D. 4

15. Bila diketahui $x + y = 270^\circ$, maka ...

- A. $\cos x + \sin y = 0$ D. $\sin x - \sin y = 0$
B. $\cos x - \sin y = 0$ E. $\sin x + \sin y = -1$
C. $\cos x + \cos y = 0$

16. Jika $\tan^2 x + 1 = a^2$, maka $\sin^2 x = \dots$

- A. $\frac{1-a^2}{a^2}$ C. $\frac{1}{a^2}$ E. $\frac{a^2-1}{a^2}$
B. $\frac{-a^2}{a^2+1}$ D. $\frac{a^2}{a^2+1}$

17. Jika $\frac{\pi}{2} < x < \pi$ dan $\tan x = a$, maka $(\sin x + \cos x)^2$ sama dengan...

- A. $\frac{a^2-2a+1}{a^2+1}$ C. $\frac{a^2+2a+1}{a^2-1}$ E. $\frac{a^2-2a-1}{a^2-1}$
B. $a\frac{a^2-a+1}{a^2+1}$ D. $\frac{a^2-a+1}{a^2+1}$

18. Jika $p - q = \cos A$ dan $\sqrt{2pq} = \sin A$, maka $p^2 + q^2 = \dots$

- A. 0 C. $\frac{1}{4}$ E. 1
B. $\frac{1}{8}$ D. $\frac{1}{2}$