



<p>01. $\sin (180^\circ - A) = \dots$</p> <p>(A) $\tan A$ (B) $-\cos A$ (C) $-\sin A$ (D) $\sin A$ (E) $\cos A$</p>	
<p>02. Jika sudut θ di kuadran IV dan $\cos \theta = \frac{1}{a}$ maka $\sin \theta = \dots$</p> <p>(A) $-\sqrt{a^2-1}$ (B) $-\sqrt{1-a^2}$ (C) $\frac{-1}{\sqrt{a^2-1}}$ (D) $\frac{-\sqrt{a^2-1}}{a}$ (E) $\frac{\sqrt{a^2-1}}{a}$</p>	
<p>03. Jika $\cos \alpha = \frac{3}{5}$ dan $0^\circ \leq \theta \leq 90^\circ$ maka $\tan \alpha = \dots$</p> <p>(A) $\frac{3}{5}$ (B) $\frac{4}{3}$ (C) $\frac{3}{4}$ (D) $\frac{4}{5}$ (E) $\frac{5}{4}$</p>	
<p>04. $\cos^2 \frac{\pi}{6} - \sin^2 \frac{3\pi}{4} + 8 \sin \frac{\pi}{4} \cos \frac{3\pi}{4} = \dots$</p> <p>(A) $-4\frac{1}{4}$ (B) $-3\frac{3}{4}$ (C) $4\frac{1}{4}$ (D) 4 (E) $3\frac{3}{4}$</p>	



<p>05. $\frac{\sin 270^\circ \cos 135^\circ \tan 135^\circ}{\sin 150^\circ \cos 225^\circ} = \dots$</p> <p>(A) -2 (B) $-\frac{1}{2}$ (C) 1 (D) $\frac{1}{2}\sqrt{2}$ (E) 2</p>	
<p>06. Jika $\tan^2 x + 1 = a^2$ maka $\sin^2 x = \dots$</p> <p>(A) $\frac{1-a^2}{a^2}$ (B) $-\frac{a^2}{a^2+1}$ (C) $\frac{1}{a^2}$ (D) $\frac{a^2}{a^2+1}$ (E) $\frac{a^2-1}{a^2}$</p>	
<p>07. Jika $\sin x = \frac{1}{5}\sqrt{5}$, maka</p> <p>$\cos x - 5\cos\left(\frac{\pi}{2} + x\right) + 2\sin(\pi - x) = \dots$</p> <p>(A) $-\frac{1}{5} - \frac{1}{5}\sqrt{5}$ (B) $-\sqrt{5}$ (C) $\frac{1}{5}\sqrt{5}$ (D) $\frac{2}{5}\sqrt{5}$ (E) $\frac{9}{5}\sqrt{5}$</p>	
<p>08. Diberikan segitiga ABC siku-siku di C. Jika $\cos(A + C) = k$, maka $\sin A + \cos B = \dots$</p> <p>(A) $-\frac{1}{2}k$ (B) -k (C) -2k (D) $\frac{1}{2}k$ (E) 2k</p>	



<p>09. Jika $\sin x = a$ dan $\cos y = b$ dengan $0 < x < \frac{\pi}{2}$ dan $\frac{\pi}{2} < y < \pi$, maka $\tan x + \tan y = \dots$</p> <p>(A) $\frac{ab - \sqrt{(1-a^2)(1-b^2)}}{b\sqrt{1-a^2}}$</p> <p>(B) $\frac{ab + \sqrt{(1-a^2)(1-b^2)}}{b\sqrt{1-a^2}}$</p> <p>(C) $\frac{ab - \sqrt{(1-a^2)(1-b^2)}}{b\sqrt{1-b^2}}$</p> <p>(D) $\frac{ab + \sqrt{(1-a^2)(1-b^2)}}{b\sqrt{1-b^2}}$</p> <p>(E) $\frac{a - \sqrt{(1-b^2)} - b\sqrt{(1-a^2)}}{\sqrt{(1-a^2)(1-b^2)}}$</p>	
<p>10. Jika x di kuadran II dan $\tan x = a$, maka $\sin x = \dots$</p> <p>(A) $\frac{a}{\sqrt{1+a^2}}$</p> <p>(B) $\frac{-a}{\sqrt{1+a^2}}$</p> <p>(C) $\frac{1}{\sqrt{1+a^2}}$</p> <p>(D) $\frac{-1}{a\sqrt{1+a^2}}$</p> <p>(E) $\frac{-\sqrt{1-a^2}}{a}$</p>	
<p>11. Jika $A + B + C = 360^\circ$, maka $\frac{\sin \frac{A}{2}}{\sin \frac{B+C}{2}} = \dots$</p> <p>....</p> <p>(A) $\tan \frac{A}{2}$</p> <p>(B) $\cot \frac{A}{2}$</p> <p>(C) $\sec \frac{B+C}{2}$</p> <p>(D) 1</p> <p>(E) 0</p>	

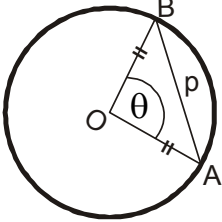


<p>12. Jika $\cos\beta = -\frac{1}{2}\sqrt{3}$ dan sudut β terletak pada kuadran II, maka $\tan \beta = \dots$</p> <p>(A) $\sqrt{3}$ (B) $\frac{1}{9}\sqrt{3}$ (C) $\frac{1}{2}$ (D) $-\frac{1}{3}\sqrt{3}$ (E) $-\sqrt{3}$</p>	
<p>13. Jika $-\frac{\pi}{2} < x < \frac{\pi}{2}$ dan $\tan x = -1$, maka $\cos x + 2 \sin x = \dots$</p> <p>(A) $-\frac{3}{2}\sqrt{2}$ (B) $-\frac{1}{2}\sqrt{2}$ (C) 0 (D) $\frac{1}{2}\sqrt{2}$ (E) $\frac{3}{2}\sqrt{2}$</p>	
<p>14. $\frac{\sin x \cdot \cos x}{\tan x}$ sama dengan</p> <p>(A) $\sin^2 x$ (B) $\sin x$ (C) $\cos^2 x$ (D) $\cos x$ (E) $\frac{1}{\sin x}$</p>	
<p>15. $\frac{\sin x}{1 - \cos x} = \dots$</p> <p>(A) $\frac{1 + \cos x}{\sin x}$ (B) $\frac{1 - \cos x}{\sin x}$ (C) $\frac{1 + \sin x}{\cos x}$ (D) $\frac{1 - \sin x}{\cos x}$ (E) $\frac{\cos x - 1}{\sin x}$</p>	



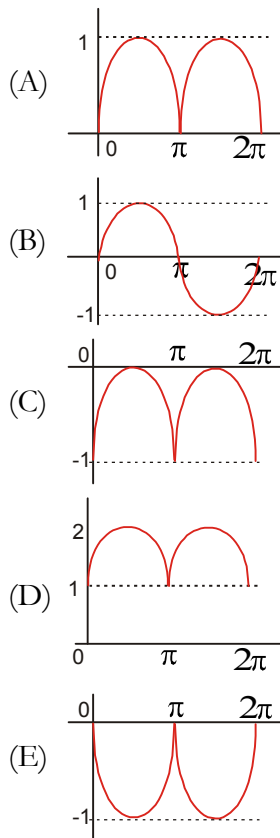
<p>16. Jika $p - q = \cos A$ dan $\sqrt{2pq} = \sin A$, maka $p^2 + q^2 = \dots$</p> <p>(A) 0 (B) 1 (C) $\frac{1}{2}$ (D) $\frac{1}{4}$ (E) -1</p>	
<p>17. Nilai x yang memenuhi $2 \cos^2 x + \cos x - 1 = 0$, $0 \leq x \leq \pi$ adalah</p> <p>(A) $\frac{1}{3}\pi$ dan π (B) $\frac{1}{3}\pi$ dan $\frac{2}{3}\pi$ (C) $\frac{1}{3}\pi$ dan $\frac{3}{4}\pi$ (D) $\frac{1}{4}\pi$ dan $\frac{3}{4}\pi$ (E) $\frac{1}{4}\pi$ dan $\frac{2}{3}\pi$</p>	
<p>18. Jika $-\frac{\pi}{2} < x < \frac{\pi}{2}$ dan $6\sin^2 x - \sin x - 1 = 0$ maka $\cos x = \dots$</p> <p>(A) $\frac{1}{2}\sqrt{3}$ dan $\frac{2}{3}\sqrt{2}$ (B) $-\frac{1}{2}\sqrt{3}$ dan $\frac{2}{3}\sqrt{2}$ (C) $\frac{1}{2}\sqrt{3}$ dan $-\frac{2}{3}\sqrt{2}$ (D) $-\frac{1}{3}\sqrt{2}$ dan $-\frac{2}{3}\sqrt{3}$ (E) $\frac{1}{3}\sqrt{2}$ dan $\frac{2}{3}\sqrt{3}$</p>	
<p>19. Jika $0 < x < \pi$ dan x memenuhi $\tan^2 x - \tan x - 6 = 0$, maka himpunan nilai $\sin x$ adalah</p> <p>(A) $\{\frac{3\sqrt{10}}{10}, \frac{2\sqrt{5}}{5}\}$ (B) $\{\frac{3\sqrt{10}}{10}, -\frac{2\sqrt{5}}{5}\}$ (C) $\{-\frac{3\sqrt{10}}{10}, \frac{2\sqrt{5}}{5}\}$ (D) $\{\frac{\sqrt{10}}{10}, \frac{\sqrt{5}}{5}\}$ (E) $\{\frac{\sqrt{10}}{10}, \frac{2\sqrt{5}}{5}\}$</p>	



<p>20. Jika $\frac{\tan^2 x}{1 + \sec x} = 1$, $0^\circ < x < 90^\circ$, maka sudut x adalah</p> <p>(A) 0° (B) 30° (C) 45° (D) 60° (E) 75°</p>	
<p>21. Diketahui segitiga PQR siku-siku di Q. Jika $\sin(Q + P) = r$ maka $\cos P - \sin R = \dots$</p> <p>(A) $-2r$ (B) $-r$ (C) 0 (D) R (E) $2r$</p>	
<p>22. Pada gambar di samping, jika $\angle AOB = \theta$, $AB = p$, dan $OA = q$, maka $\cos \theta = \dots$</p>  <p>(A) $\frac{p-q}{p}$ (B) $\frac{p-q^2}{p}$ (C) $\frac{p^2-q}{q}$ (D) $\frac{2q^2-p^2}{2q^2}$ (E) $\frac{p^2-q}{2q^2}$</p>	
<p>23. Seorang anak tingginya 1,55 meter berdiri pada jarak 12 meter dari kaki tiang bendera. Ia melihat puncak tiang bendera dengan sudut 45° dengan arah mendatar, maka tinggi tiang bendera itu adalah meter.</p> <p>(A) 12 (B) $12\sqrt{2}$ (C) 13,55 (D) 15,55 (E) $13,55\sqrt{2}$</p>	



24. Grafik fungsi $y = |\sin x| + 1$ dalam selang $(0, 2\pi)$ adalah



25. Dalam segitiga ABC, $AC = 5$, $AB = 8$, dan $\angle CAB = 60^\circ$. Jika $\gamma = \angle ACB$, maka $\cos \gamma = \dots$

- (A) $\frac{1}{7}\sqrt{3}$
(B) $\frac{3}{7}\sqrt{3}$
(C) $\frac{4}{7}\sqrt{3}$
(D) $\frac{1}{7}$
(E) $\frac{3}{7}$

26. Nilai maksimum fungsi $y = 1 + \sin 2x + \cos 2x$ adalah

- (A) 2
(B) $1 + \sqrt{2}$
(C) 3
(D) $1 + 2\sqrt{2}$
(E) 4