



<p>01. Nilai <math>\tan 195^\circ = \dots</math></p> <p>(A) <math>\frac{4}{3} - \frac{2}{3}\sqrt{3}</math></p> <p>(B) <math>2 + \sqrt{3}</math></p> <p>(C) <math>2 - \sqrt{3}</math></p> <p>(D) <math>\frac{4}{3} - \frac{2}{3}(\frac{4}{3} - \frac{2}{3}\sqrt{3})</math></p> <p>(E) <math>\frac{1 - \sqrt{3}}{1 + \sqrt{3}}</math></p>	
<p>02. <math>\cos A = -\frac{5}{13}</math>, <math>\sin B = \frac{4}{5}</math>. Sudut A tumpul, sudut B lancip, maka <math>\sin A \cos B + \cos A \sin B</math> sama dengan ....</p> <p>(A) <math>\frac{16}{65}</math>                      (D) <math>-\frac{16}{65}</math></p> <p>(B) <math>\frac{48}{65}</math>                      (E) <math>-\frac{56}{65}</math></p> <p>(C) <math>\frac{56}{65}</math></p>	
<p>03. Nilai <math>\cos 50^\circ \cdot \cos 10^\circ - \sin 50^\circ \cdot \sin 10^\circ = \dots</math></p> <p>(A) <math>\frac{1}{2}</math></p> <p>(B) <math>\frac{1}{2}\sqrt{2}</math></p> <p>(C) <math>\frac{1}{2}\sqrt{3}</math></p> <p>(D) <math>-\frac{1}{2}</math></p> <p>(E) <math>-\frac{1}{2}\sqrt{3}</math></p>	
<p>04. Jika <math>(A - B) = 30^\circ</math> dan <math>\sin A \cdot \cos B = \frac{2}{3}</math> dengan A dan B adalah sudut lancip, nilai <math>\sin(A + B) = \dots</math></p> <p>(A) <math>\frac{1}{6}</math>                      (D) <math>\frac{4}{6}</math></p> <p>(B) <math>\frac{2}{6}</math>                      (E) <math>\frac{5}{6}</math></p> <p>(C) <math>\frac{3}{6}</math></p>	

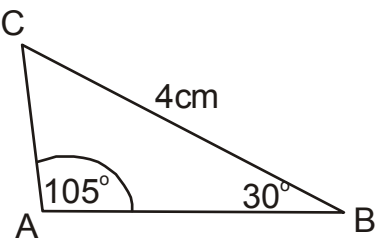


<p>05. Fungsi <math>\sin(x + 120^\circ)</math> dapat dituliskan sebagai <math>p \cos x + q \sin x</math> untuk setiap nilai <math>x</math> jika ....</p> <p>(A) <math>p = \frac{1}{2}</math> dan <math>q = \frac{\sqrt{3}}{2}</math></p> <p>(B) <math>p = \frac{1}{2}</math> dan <math>q = -\frac{\sqrt{3}}{2}</math></p> <p>(C) <math>p = -\frac{1}{2}</math> dan <math>q = \frac{\sqrt{3}}{2}</math></p> <p>(D) <math>p = \frac{\sqrt{3}}{2}</math> dan <math>q = -\frac{1}{2}</math></p> <p>(E) <math>p = \frac{\sqrt{3}}{2}</math> dan <math>q = \frac{1}{2}</math></p>	
<p>06. Jika <math>\tan \alpha = \frac{3}{4}</math> dan <math>\alpha + \beta = 315^\circ</math>, <math>\tan \beta = \dots</math></p> <p>(A) <math>\frac{3}{4}</math>                      (D) <math>-\frac{4}{5}</math></p> <p>(B) <math>\frac{4}{5}</math>                        (E) <math>-7</math></p> <p>(C) <math>-\frac{3}{5}</math></p>	
<p>07. Jika untuk segitiga ABC diketahui <math>\cos A \cos B = \sin A \sin B</math> dan <math>\sin A \cos B = \cos A \sin B</math>, segitiga ABC adalah segitiga ....</p> <p>(A) Tumpul</p> <p>(B) Sama sisi</p> <p>(C) Siku-siku sama kaki</p> <p>(D) Sama kaki tak siku-siku</p> <p>(E) Siku-siku tidak sama kaki</p>	
<p>08. Jika <math>\tan 15^\circ = p</math>, nilai</p> $\frac{\tan 165^\circ - \tan 105^\circ}{1 + \tan 165^\circ \cdot \tan 105^\circ} = \dots$ <p>(A) <math>\frac{p^2 - 1}{p}</math></p> <p>(B) <math>\frac{p^2 - 1}{2p}</math></p> <p>(C) <math>\frac{1 - p^2}{p}</math></p> <p>(D) <math>\frac{1 - p^2}{2}</math></p> <p>(E) <math>\frac{1 - p^2}{2p}</math></p>	



<p>09. Jika <math>\alpha + \beta = \frac{\pi}{6}</math> dan <math>\cos \alpha \cdot \cos \beta = \frac{3}{4}</math>, <math>\cos(\alpha - \beta) = \dots</math></p> <p>(A) <math>\frac{1}{9} + \frac{\sqrt{3}}{2}</math>      (D) <math>\frac{3}{2} - \frac{\sqrt{3}}{2}</math> (B) <math>\frac{3}{2} + \frac{\sqrt{3}}{2}</math>      (E) <math>\frac{\sqrt{3}}{2}</math> (C) <math>\frac{3}{4} - \frac{\sqrt{3}}{2}</math></p>	
<p>10. Diberikan segitiga ABC dengan <math>\angle ACB = 105^\circ</math>, <math>\angle ABC = 45^\circ</math> dan <math>AB = \sqrt{2} + \sqrt{6}</math> cm . Panjang sisi BC = ....</p> <p>(A) <math>\sqrt{3}</math> cm      (D) 3 cm (B) <math>\sqrt{6}</math> cm      (E) <math>2\sqrt{2}</math> cm (C) 2 cm</p>	
<p>11. Jika <math>\tan \theta + \tan \gamma = p</math>, <math>p \neq 0</math>, <math>\frac{\cos \theta \cdot \cos \gamma}{\sin(\theta + \gamma)} = \dots</math></p> <p>(A) <math>\frac{1}{p}</math>      (D) <math>2p</math> (B) <math>\frac{2}{p}</math>      (E) <math>p^2</math> (C) <math>p</math></p>	
<p>12. Jika <math>\sin 15^\circ = p</math>, <math>\sin 75^\circ = \dots</math></p> <p>(A) <math>\frac{1}{2}(\sqrt{-3+3p^2} + \sqrt{p^2})</math> (B) <math>\frac{1}{2}(\sqrt{3+3p^2} - \sqrt{p^2})</math> (C) <math>\frac{1}{2}(\sqrt{3+3p^2} + \sqrt{p^2})</math> (D) <math>\frac{1}{2}(\sqrt{3-3p^2} - \sqrt{p^2})</math> (E) <math>\frac{1}{2}(\sqrt{3-3p^2} + \sqrt{p^2})</math></p>	
<p>13. Jika <math>\sin(A - \frac{\pi}{4}) - 5 \cos(A - \frac{\pi}{4}) = 0</math>, <math>\tan A = \dots</math></p> <p>(A) <math>-\frac{3}{2}</math>      (D) <math>\frac{3}{2}</math> (B) <math>-\frac{2}{3}</math>      (E) 2 (C) <math>\frac{1}{2}</math></p>	



<p>14. Dalam segitiga lancip ABC, <math>\sin C = \frac{2}{\sqrt{13}}</math>. Jika <math>\tan A \cdot \tan B = 13</math> maka <math>\tan A + \tan B = \dots</math></p> <p>(A) -18 (B) -8 (C) <math>\frac{20}{3}</math> (D) <math>8^3</math> (E) 18</p>	
<p>15. <math>\alpha</math> dan <math>\beta</math> adalah dua sudut lancip. Jika <math>\tan \alpha = x</math> dan <math>\cos \beta = \frac{x}{\sqrt{1+x^2}}</math>, besar sudut <math>(\alpha + \beta) = \dots</math></p> <p>(A) <math>105^\circ</math> (B) <math>75^\circ</math> (C) <math>60^\circ</math> (D) <math>90^\circ</math> (E) <math>135^\circ</math></p>	
<p>16. Luas daerah segitiga ABC pada gambar di samping adalah .... m<sup>2</sup>.</p>  <p>(A) <math>(\sqrt{6} - \sqrt{2})</math> (B) <math>2(\sqrt{6} - \sqrt{2})</math> (C) <math>4(\sqrt{3} - 1)</math> (D) <math>4(\sqrt{3} + 1)</math> (E) <math>2(\sqrt{6} + \sqrt{2})</math></p>	
<p>17. Diketahui <math>\tan a = \frac{1}{2}</math>, <math>\tan b = \frac{1}{5}</math>, <math>\tan c = \frac{1}{8}</math>. Nilai <math>\tan (a + b + c) = \dots</math></p> <p>(A) <math>\frac{1}{2}</math>                      (D) 2 (B) 1                            (E) <math>\frac{5}{2}</math> (C) <math>\frac{3}{2}</math></p>	

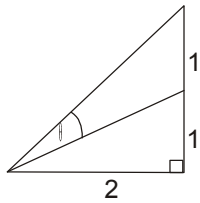


18. Jika  $A + B = 225^\circ$ . Nilai dari bentuk

$$\frac{\cot A}{1 + \cot A} \cdot \frac{\cot B}{1 + \cot B} = \dots$$

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

19. Nilai  $\tan \theta = \dots$



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

20. Nilai  $\sin 22,5^\circ = \dots$

- (A)  $\frac{1}{2}\sqrt{2-\sqrt{2}}$   
(B)  $\frac{1}{2}\sqrt{2+\sqrt{2}}$   
(C)  $\frac{1}{4}\sqrt{2-\sqrt{2}}$   
(D)  $\frac{1}{4}\sqrt{2+\sqrt{2}}$   
(E)  $\frac{2}{3}\sqrt{5}$