

TRIGONOMETRİ 1

1-)  $\frac{127\pi}{5}$  'nin esas ölçüsü kaç radyandır?

a)  $\frac{\pi}{5}$  b)  $\frac{2\pi}{5}$  c)  $\frac{3\pi}{5}$  d)  $\frac{7\pi}{5}$  e)  $\frac{9\pi}{5}$

2-)  $\frac{\text{Sin}x + \text{Sec}x}{\text{Cos}x + \text{Cosec}x} = 2$  ise  $\cot x = ?$

a) 1 b)  $\frac{1}{2}$  c) 2 d)  $\frac{3}{2}$  e)  $\frac{3}{4}$

3-) x bir reel acıyı göstermek üzere

$(1 - \text{Sin}x + \text{Cos}x)(1 + \text{Sin}x - \text{Cos}x) = ?$

a) 0 b)  $\text{Sin}2x$  c)  $1 - \text{Sin}2x$  d) 2 e)  $2\text{Sin}x$

4-)  $\frac{2\text{Cos}x - 3\text{Sin}x}{\text{Cos}x + 2\text{Sin}x} = 5$  ise  $\cot x = ?$

a)  $-\frac{7}{4}$  b)  $-\frac{13}{3}$  c)  $-\frac{7}{3}$  d) -2 e)  $-\frac{3}{7}$

5-)  $(\tan x + \text{Sec}x)^2 \cdot \frac{1 - \text{Sin}x}{1 + \text{Sin}x} = ?$

a) 1 b)  $1 + \text{Sin}x$  c) 0 d)  $\text{Sec}^2x$  e)  $\text{Cos}x$

6-)  $\tan x + \text{Cot}x = 3$  ise  $\tan^2 x + \text{Cot}^2 = ?$

a) 6 b) 7 c) 8 d) 9 e) 10

7-) Aşağıdaki acıları işaret sırasına göre sıralayınız?

$\text{Sin}500^\circ$ ,  $\text{Cos}(-300^\circ)$ ,  $\tan 150^\circ$ ,  $\text{Sec}240^\circ$

a) +, -, +, - b) +, +, -, - c) +, -, +, + d) +, +, -, - e) -, +, +, -

8-)  $\frac{\text{Sin}(-130^\circ) \cdot \text{Sec}(790^\circ)}{\text{Cos}(-680^\circ) \cdot \text{Sin}(-290^\circ)} = ?$

a) 1 b) -1 c)  $-\tan 50$  d)  $-\tan 10$  e)  $-\tan 20$

9-  $\tan(-810^\circ + a)$  aşağıdakilerden hangisidir?

a)  $\text{Cosa}$  b)  $-\tan a$  c)  $-\text{Cosa}$  d)  $\tan a$  e)  $-\text{Cota}$

10-  $A = -2 + \text{Sin}^2 12 + \text{Sin}^2 18$  ise  $-A^{-1} = ?$

a)  $-\frac{1}{2}$  b) -1 c) 1 d) 2 e)  $\frac{1}{3}$

11-  $2 \tan 130^\circ + \frac{2}{\tan 220^\circ} - 1 = ?$

a) 1 b) -1 c) 0 d)  $-\tan 950$  e)  $\tan 50 - 1$

12)  $\pi < x < \frac{3\pi}{2}$  olmak üzere  $\tan x = \sqrt{\frac{2}{7}}$  ise

$\text{Sin}(x - \pi) = ?$

a)  $-\frac{\sqrt{2}}{3}$  b)  $\frac{\sqrt{5}}{4}$  c)  $-\frac{\sqrt{3}}{3}$  d)  $\frac{\sqrt{2}}{3}$  e)  $-\frac{2}{3}$

13)  $\tan 20^\circ = a$  ise  $\frac{\tan 200^\circ - \tan 110^\circ}{\tan 250^\circ - \tan 340^\circ} = ?$

a)  $-\frac{1}{a^2}$  b)  $\frac{a-1}{a+2}$  c)  $-\frac{2}{a}$  d)  $\frac{a+1}{a-1}$  e) 1

14)  $\frac{\text{Sin} 210^\circ - \text{Cos} 1120^\circ}{\tan(-330^\circ)} = ?$

a)  $\frac{\sqrt{3}}{3}$  b)  $\frac{2\sqrt{3}}{3}$  c)  $\frac{4\sqrt{3}}{3}$  d) 1 e)  $-\sqrt{3}$

15)  $3\text{Cos}36^\circ - 2\text{Sin}54^\circ + \frac{1}{\text{Sec}144^\circ} + 3 = ?$

a)  $1 - 2\text{Cos}36$  b)  $3 + 2\text{Cos}50$  c)  $3\text{Sin}56$  d) 0 e) 3

16)  $\frac{\text{Sin}155^\circ - \text{Cos}130^\circ}{\text{Sin}220^\circ - \text{Cos}295^\circ} = ?$

a)  $\text{Sin}25^\circ - \text{Cos}50^\circ$  b)  $2 \tan 25^\circ - \text{Cot}50$  c) 1 d) 0 e) 3

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TRIGO NOMETRİ 2

1)  $\frac{\tan(-1125^{\circ}) \cdot \sin 750^{\circ}}{\cos \frac{3\pi}{4} \cdot \cot \frac{9\pi}{4}} = ?$

a)  $\frac{\sqrt{3}}{2}$  b)  $\frac{\sqrt{2}}{2}$  c)  $\frac{1}{2}$  d) 2 e) 1

2)  $x \in \left(\frac{3\pi}{2}, 2\pi\right)$  ve  $\tan x = -\frac{12}{5}$  ise

$\sin(x - \pi) + \cos\left(\frac{7\pi}{2} + x\right) = ?$

a)  $\frac{12}{13}$  b)  $\frac{5}{13}$  c) 1 d) 0 e)  $-\frac{12}{13}$

3)  $\tan 20^{\circ} = x$  ise  $\tan 110^{\circ} = ?$

a)  $-\frac{1}{x}$  b)  $-x$  c)  $x$  d)  $\frac{1}{x}$  e) 10

4)  $\cot 220^{\circ} + \cot(-50^{\circ}) = ?$

a)  $2\operatorname{cosec} 10^{\circ}$  b)  $2\operatorname{sec} 10^{\circ}$  c)  $2 \tan 10^{\circ}$   
d)  $2\cot 10^{\circ}$  e)  $2\cos 10^{\circ}$

5)  $\sin 3x \cdot \operatorname{cosec} x + \cos 3x \cdot \operatorname{sec} x = ?$

a)  $2\sin 4x$  b)  $\sin 4x$  c)  $4\sin x$   
d)  $8\sin x \cdot \cos x$  e)  $4\cos 2x$

6)  $\cos\left(\frac{\pi}{4} + x\right) + \cos\left(\frac{\pi}{4} - x\right) = \frac{1}{2}$  olduğuna göre

$\cos x = ?$

a)  $\frac{\sqrt{2}}{2}$  b)  $\frac{\sqrt{2}}{4}$  c)  $\frac{\sqrt{2}}{6}$  d)  $\frac{\sqrt{2}}{8}$  e)  $\frac{\sqrt{2}}{10}$

7)  $\tan(45 - a) = b$  ise  $\tan(45 + a)$  nin  $b$  türünden değeri kaçtır?

a)  $\frac{1}{b}$  b)  $b$  c)  $-b$  d)  $-\frac{1}{b}$  e)  $b + 1$

8-)  $\cos 2\alpha = m$  ise  $\tan^2 \alpha = ?$

a)  $\frac{1-m}{1+m}$  b)  $\frac{1+m}{1-m}$  c)  $2m+1$  d)  $m^2-1$  e) 1

9-)  $x - y = 30^{\circ}$  ise

$(\sin x - \sin y)^2 + (\cos x - \cos y)^2 = ?$

a) 1 b) 3 c)  $\sqrt{3}$  d)  $2 - \sqrt{3}$  e)  $3 + \sqrt{5}$

10-)  $x$  bir dar açıdır.  $\tan x = 3$  ise

$\frac{1}{2} \sin 2x - \cot x = ?$

a)  $-\frac{1}{30}$  b)  $-\frac{3}{25}$  c)  $-\frac{1}{20}$  d)  $-\frac{2}{15}$  e)  $-\frac{1}{10}$

11-)  $\tan 255^{\circ} = ?$

a)  $1 + \sqrt{3}$  b)  $\sqrt{3} - 1$  c)  $2 - \sqrt{3}$   
d)  $3 - \sqrt{3}$  e)  $2 + \sqrt{3}$

12-)  $2\sin x - \cos x = 0$  ise  $\cos 2x = ?$

a)  $\frac{3}{\sqrt{13}}$  b)  $\frac{2}{\sqrt{5}}$  c)  $\frac{3}{5}$  d)  $\frac{2}{5}$  e) 1

13-)  $\frac{\sin 35^{\circ}}{\sin 5^{\circ}} - \frac{\cos 35^{\circ}}{\cos 5^{\circ}} = ?$

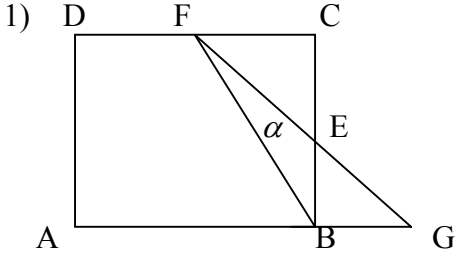
a)  $\frac{\sqrt{3}}{2}$  b)  $\frac{1}{2}$  c)  $\operatorname{sec} 10^{\circ}$  d)  $\operatorname{cosec} 10^{\circ}$  e)  $\tan 10^{\circ}$

14-)  $(1 - \tan^2 15^{\circ}) = k \cdot (1 + \tan^2 15^{\circ})$  , ise  $k = ?$

a)  $\frac{\sqrt{3}}{2}$  b)  $\frac{1}{2}$  c) 1 d)  $\sqrt{3}$  e)  $\frac{\sqrt{3}}{4}$

C&Ç \*TRIGONOMETRİ 2 \*C&Ç

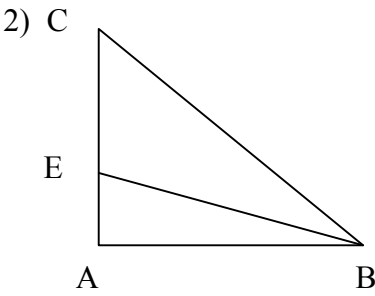
TRİGONOMETRİ 3



ABCD Kare

$$|FC| = |FD| = |EC| = |EB| \text{ İSE } \cot \alpha = ?$$

- a)1 b)2 c)3 d)4 e)5



$$|AC| \perp |AB|$$

$$|BE| = |EC| \text{ ve } \sin(BEA) = \frac{4}{5}$$

İSE  $\tan C = ?$

- a)  $\frac{3}{4}$  b)  $\frac{8}{15}$  c)  $\frac{2}{15}$  d)  $\frac{1}{4}$  e)  $\frac{1}{2}$

3-)  $\frac{\cos^4 75^\circ + \sin^4 75^\circ}{\sin 60^\circ} = ?$

- a)  $\frac{7\sqrt{3}}{12}$  b)0 c)  $\frac{1}{2}$  d)1 e)  $\frac{\sqrt{3}}{2}$

4-)  $\sin(x - \pi) + \cos\left(\frac{7\pi}{2} + x\right) = ?$

- a)  $\frac{1}{2}$  b)0 c)  $\frac{1}{2}$  d)1 e)  $\frac{\sqrt{3}}{2}$

5-)  $\sin(-42^\circ) \cdot \sin(-48^\circ) = x$  ise  $x = ?$

- a)  $\frac{1}{2} \cos 42^\circ$  b)  $\frac{1}{2} \sin 14^\circ$  c)  $\frac{1}{2} \cos 6^\circ$   
d)  $\sin 6^\circ$  e)  $2 \sin 6^\circ$

6)  $\sin \frac{x}{2} = \frac{\sqrt{3}}{2}$  ve  $0 < x < \pi$   $\cos \frac{x}{2} = ?$

- a)  $\frac{1}{3}$  b)  $\frac{1}{2}$  c)1 d)2 e)3

7-)  $\frac{2}{\tan x + \cot x} = ?$

- a)  $\sin 2x$  b)  $\cos 2x$  c)  $\tan 2x$   
d)  $\sec 2x$  e) 0

8-) x bir dar açıyı belirtmektedir

$$\cos 2x = \frac{1}{3} \text{ ise } \cos 2x = ?$$

- a)  $\sqrt{\frac{3}{2}}$  b)  $\sqrt{\frac{2}{3}}$  c)  $\sqrt{2}$  d)  $\sqrt{3}$  e)  $\sqrt{6}$

9-) x in tanımlı olduğu değerler için  $\frac{\cos 2x + 1}{\sin^2 2x} = ?$

- a)  $\frac{1}{2} \sin^2 x$  b)  $\frac{1}{2} \cos^2 x$  c)  $\frac{1}{2} \tan^2 x$   
d)  $\frac{1}{2} \sec^2 x$  e)  $\frac{1}{2} \operatorname{cosec}^2 x$

10-)  $\frac{1 + \tan^2 15^\circ}{1 - \tan^2 15^\circ} = ?$

- a)0 b)1 c)-1 d)  $\frac{\sqrt{3}}{2}$  e)  $\frac{2}{\sqrt{3}}$

11-)  $\frac{\cos^4 \frac{x}{2} - \sin^4 \frac{x}{2}}{1 - 2 \sin^2 \frac{x}{2}} = ?$

- a)-1 b)1 c)  $\frac{1}{2}$  d)  $-\frac{1}{2}$  e)  $\frac{\sqrt{2}}{2}$

12-) x bir dar açıdır.  $\cos x = \frac{1}{2}$  ise  $\tan 2x = ?$

- a)  $2\sqrt{2}$  b)  $-2\sqrt{2}$  c)  $-\frac{3\sqrt{2}}{4}$  d)  $-\frac{5\sqrt{2}}{3}$  e)  $-\frac{4\sqrt{2}}{7}$

13-)  $\cos 75^\circ \cdot \cos 15^\circ - \sin 75^\circ \cdot \sin 15^\circ = ?$

- a)  $\frac{1}{3}(\sqrt{6} - 2\sqrt{2})$  b)  $\frac{1}{3}(\sqrt{6} + 2\sqrt{2})$   
c)1 d)0 e)  $2 - 3\sqrt{2}$

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