



1. $\frac{\sin(m+n) + \sin(m-n)}{\cos(m+n) - \cos(m-n)}$ ifadesi hangisine eşittir?

- A) $-\cot n$ B) $-\tan m$ C) $\cot m$
D) $\tan n$ E) 1



2. $\sin a \cdot \cos b = \frac{3}{4}$ $\sin b \cdot \cos a = \frac{1}{2}$ ise

$\frac{\sin(a+b)}{\sin(a-b)}$ kaçadır?

- A) 1 B) 2 C) 3 D) 4 E) 5

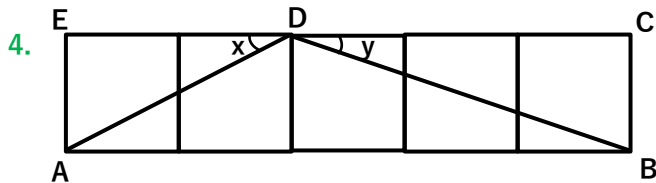


3. x ve y dar açılar olmak üzere

$\tan x = 2$ $\cot y = \frac{1}{2}$ ise

$\frac{\cos(x+y)}{\cos(x-y)}$ kaçadır?

- A) $-\frac{3}{5}$ B) $-\frac{1}{3}$ C) $\frac{1}{2}$ D) 1 E) $\frac{3}{7}$



Yukarıda birim karelerden oluşan şekle göre $\cos(x-y)$ kaçadır?



- A) 1 B) $\frac{\sqrt{2}}{2}$ C) $\frac{\sqrt{2}}{3}$ D) $\frac{3\sqrt{2}}{4}$ E) $\frac{7}{5\sqrt{2}}$

5. $\frac{\sin 70 \cdot \cos 80 + \sin 80 \cdot \cos 70}{\cos 280 \cdot \cos 80 - \sin 280 \cdot \sin 80}$ kaçadır?

- A) -1 B) $\frac{1}{2}$ C) 0 D) 1 E) $\sqrt{3}$



6. $10x = \frac{\pi}{3}$

$\frac{\sin 16x \cdot \cos 6x - \sin 6x \cdot \cos 16x}{\cos 7x \cdot \cos 2x + \sin 7x \cdot \sin 2x}$ kaçadır?

- A) $-\frac{1}{2}$ B) 0 C) 1 D) $\sqrt{3}$ E) 2



7. Aşağıdakilerden hangileri doğrudur?

I) $\cos 5 \cdot \sin 7 - \cos 7 \cdot \sin 5 = \sin 2$

II) $-\sin 10 \cdot \cos 6 + \cos 10 \cdot \sin 6 = \sin 4$

III) $\sin 9 \cdot \sin 1 - \cos 9 \cdot \cos 1 = \cos 10$

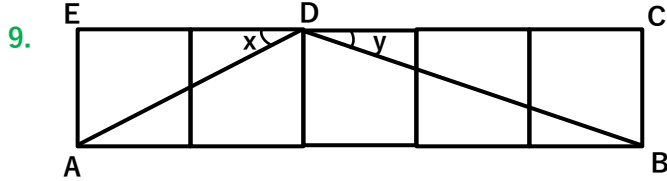
- A) I B) II C) III D) I,II E) II,III



8. $\sin 15 \cdot \cos 15 = \frac{1}{4}$ ise $\tan 15 + \cot 15$ kaçadır?

- A) 1 B) $\sqrt{3}$ C) 4 D) $2\sqrt{3}$ E) 8





Yukarıda birim karelerden oluşan şekle göre $\tan(x + y)$ kaçadır?

- A) 1 B) $\frac{\sqrt{2}}{2}$ C) $\frac{\sqrt{2}}{3}$ D) $\frac{3\sqrt{2}}{4}$ E) $\frac{7}{5\sqrt{2}}$



10. $\frac{\tan 42 + \tan 3}{1 - \tan 42 \cdot \tan 3}$ ifadesi kaçadır?

- A) -1 B) 0 C) $\frac{\sqrt{2}}{2}$ D) 1 E) $\frac{3}{2}$



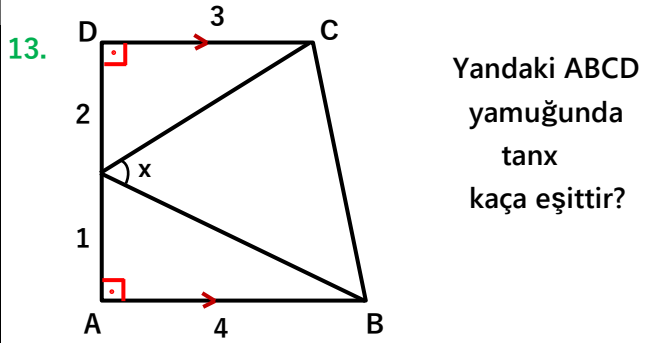
11. $\frac{\tan(70 + 3x) - \tan(3x + 10)}{1 + \tan(70 + 3x) \cdot \tan(3x + 10)}$ işleminin sonucu kaçadır?

- A) $\frac{\sqrt{2}}{3}$ B) 1 C) $\frac{\sqrt{3}}{6}$ D) $\sqrt{3}$ E) $\sqrt{5}$



12. Bir ABC üçgeninde $\tan A = 4$ $\tan B = \frac{1}{2}$ ise $\tan C$ kaçtır?

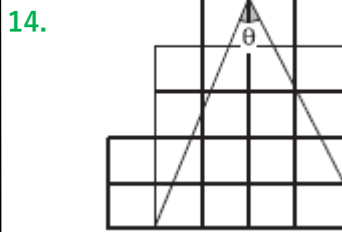
- A) $-\frac{1}{4}$ B) 0 C) $\frac{9}{2}$ D) 5 E) $\frac{17}{3}$



Yandaki ABCD yamuğunda $\tan x$ kaçadır?



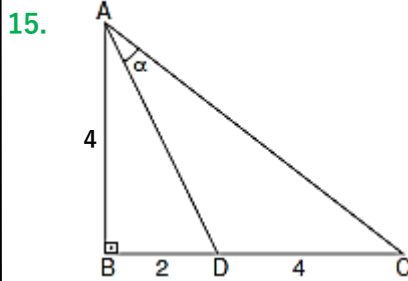
- A) $\frac{2}{13}$ B) $\frac{1}{7}$ C) $\frac{11}{10}$ D) 1 E) $\frac{15}{7}$



Yanda birim karelerden oluşturulmuş şekilde $\tan \theta$ kaçadır?



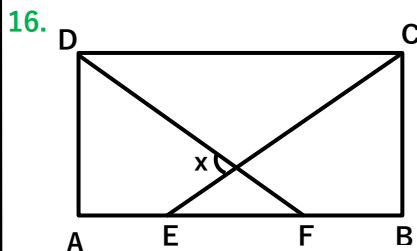
- A) $\frac{6}{5}$ B) $\frac{8}{7}$ C) $\frac{9}{8}$ D) $\frac{10}{9}$ E) $\frac{11}{10}$



Yandaki ABC dik üçgeninde $\tan \alpha$ kaçadır?



- A) $\frac{1}{2}$ B) $\frac{4}{7}$ C) $\frac{3}{4}$ D) 1 E) $\frac{5}{4}$



Yandaki ABCD dikdörtgeninde $IAEI = IEFI = IFBI = IBCI$ ise $\tan x$ kaçadır?



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

