

1. $\cos\left(\arctan\frac{\sqrt{3}}{3} + \arcsin\frac{1}{2}\right)$ ifadesi kaç eştir?

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



2. $\sin\left(\pi + \operatorname{arccot}\frac{3}{2}\right)$ ifadesi hangisine eştir?

- A) $-\frac{\sqrt{11}}{5}$ B) $-\frac{\sqrt{26}}{26}$ C) $-\frac{2\sqrt{13}}{13}$
D) $\frac{3\sqrt{5}}{7}$ E) $\frac{5\sqrt{2}}{8}$



3. $\tan(\arctan 11) + \cos(\arcsin 1)$ ifadesi kaç eştir?

- A) $\frac{3}{4}$ B) 1 C) $\frac{13}{12}$ D) 10 E) 11



4. $4 \arctan(x^3 - 7) = \pi$ denkleminde x kaçtır?

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



5. $f(x) = x \cdot \arcsin(3x - 7) + 1$

f(x) fonksiyonunun tanım kümesinde olabilecek en küçük tamsayı kaçtır?

- A) 0 B) 1 C) 2 D) 3 E) 4



6. $\frac{\arctan(-\sqrt{3})}{\arcsin(-1)}$ oranı kaç eştir?

- A) $\frac{9}{7}$ B) $\frac{10}{9}$ C) $\frac{11}{10}$ D) $\frac{13}{11}$ E) 2





7. $\cot\left(\frac{\pi}{2} - \arcsin\left(-\frac{3}{5}\right)\right)$ ifadesi hangisine eşittir?

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



8. $\arctan\frac{1}{2} + \arctan\frac{1}{3}$ aşağıdakilerden hangisine eşittir?

- A) $\frac{\pi}{6}$ B) $\frac{\pi}{5}$ C) $\frac{\pi}{4}$ D) $\frac{\pi}{3}$ E) $\frac{\pi}{2}$



9. $\sin(\arctan 2 + \operatorname{arccot} 2)$ ifadesinin eşiti nedir?

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



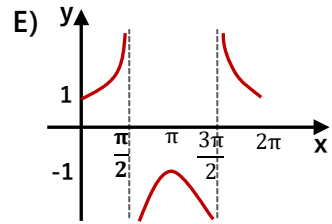
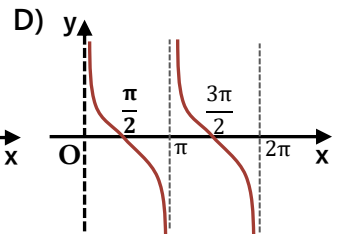
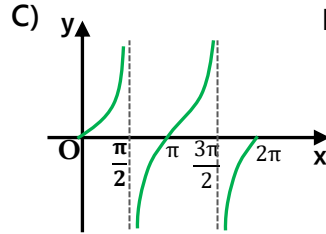
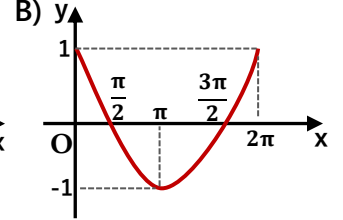
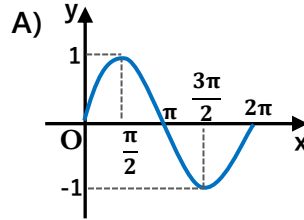
10. $f(x) = \sin^4(-3x + 8)$ $g(x) = \tan^3\left(\frac{x}{2} + 6\right)$

Yukarıdaki fonksiyonların periyotları sırası ile hangi şıkta doğru verilmiştir?

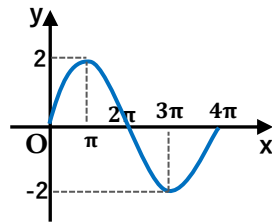


- A) $\frac{2\pi}{3}$ ve $\frac{\pi}{2}$ B) $\frac{\pi}{6}$ ve $\frac{\pi}{4}$ C) $\frac{\pi}{6}$ ve 2π
D) $\frac{3\pi}{2}$ ve $\frac{\pi}{3}$ E) $\frac{\pi}{3}$ ve 2π

11. Aşağıdakilerden hangisi $y = \cos x$ fonksiyonunun grafiğidir?



12.



Yandaki grafik aşağıdakilerden hangisinin grafiğidir?

- A) $y = \sin 2x$ B) $y = \frac{1}{2} \sin \frac{x}{2}$ C) $y = \tan x$
D) $y = 2 \cos 2x$ E) $y = 2 \sin \frac{x}{2}$

