

همراه شما
در مسیر یوس

سوالات یوس دانشگاه ارجیس



Erciyes University
INTERNATIONAL STUDENTS' EXAM

uniland.ir



۰۲۱۹۱۳۰۵۹۰۶



uniland_yos

1. $\frac{(a-b)^3}{a^2+ab+b^2} \cdot \frac{a^2-b^2}{(a+b)^2} = ?$

- A) $a+b$ B) $\frac{(a-b)^3}{a^2+ab+b^2}$ C) $\frac{(a-b)^3}{a^3-b^3}$
 D) $\frac{(a-b)^3 \cdot (a+b)}{a^3-b^3}$ E) $a-b$

4. $\lim_{x \rightarrow \infty} \frac{\pi^{x+1} + e^{x-3}}{4\pi^x + 21} = ?$

- A) 0 B) ∞ C) $\frac{1}{4}$ D) $\frac{\pi}{4}$ E) $\frac{1}{4e^3}$

2. $\sqrt{15 \cdot 17 \cdot 19 \cdot 21 + 16} = ?$

- A) 324 B) 225 C) 319 D) 220 E) 219

5. $\int \left(3x^2 + \frac{5}{x} + e^x \right) dx = ?$

- A) $x^3 + \ln x + e^x + c$
 B) $x^3 + 5\ln x + \frac{e^{2x}}{2} + c$
 C) $\frac{3}{2}x^3 + \ln 5x + e^x + c$
 D) $x^3 + 5\ln x + e^x + c$
 E) $\frac{2}{3}x^3 + 5\ln x + e^x + c$

3. $\lim_{x \rightarrow 64} \frac{\sqrt[3]{x} - 8}{\sqrt[3]{x} - 4} = ?$

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

6. $\frac{2}{\log_4 6} + \frac{4}{\log_3 6} - \frac{1}{\log_x 6} = 2$

$\Rightarrow x = ?$

- A)6 B)18 C)36 D)12 E)24

9. 3, 8, 23, x, 203, y

$y - x = ?$

- A)542 B)543 C)540 D)545 E)541

10. $\sqrt{x+2} - \sqrt{x-2} = A$

$\sqrt{x+2} + \sqrt{x-2} = ?$

- A)4 + A B)4 - A C) $\frac{A}{4}$ D) $\frac{4}{A}$ E)4A

7. $11^2 = 1 + 3 + 5 + \dots + 21$

$9^2 = 1 + 3 + 5 + \dots + x$

$\Rightarrow x = ?$

- A)21 B)9 C)10 D)17 E)19

11. $f(x^3 + 2x) = 3x^3 + 6x + 17$

$\Rightarrow f(8) = ?$

- A)24 B)31 C)23 D)25 E)41

1-D 7-D

2-C 8-C

3-D 9-C

4-D 10-D

5-B 11-E

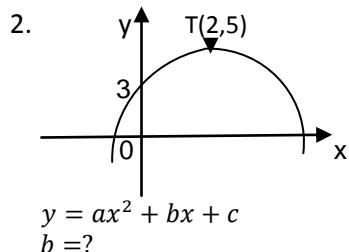
6-C

ÖRNEK SORULAR:

1. $\frac{x^2-x-2}{x^3+2x^2+x} \cdot \frac{x^3-x}{x^2-5x+6} = ?$

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

Cevap: b



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

Cevap: e

3. $\lim_{x \rightarrow 8} \frac{\sqrt[3]{x}-2}{\sqrt{x}-2\sqrt{2}} = ?$

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

Cevap: c

4. $\sum_{n=0}^{\infty} \frac{1+3^n}{5^n} = ?$

- a) $\frac{4}{7}$ b) $\frac{5}{2}$ c) $\frac{15}{2}$ d) $\frac{15}{4}$ e) 5

Cevap: d

5. $\frac{\sin x + 2\cos x}{3\sin x + \cos x} = \frac{11}{13}$

$\cos 2x = ?$

- a) $\frac{7}{25}$ b) $\frac{9}{16}$ c) $\frac{16}{25}$ d) $\frac{9}{25}$ e) 1

Cevap: a

6. $\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = \frac{1}{3}$

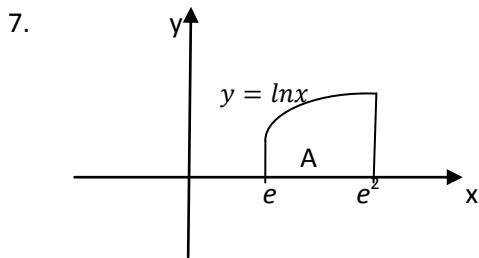
$3a - 2c + 4e = 7$

$3b + 4f = 17$

$d = ?$

- a) -5 b) -2 c) 1 d) 10 e) 17

Cevap: b



$$y = \ln x, \quad x = e, \quad x = e^2 \Rightarrow A = ?$$

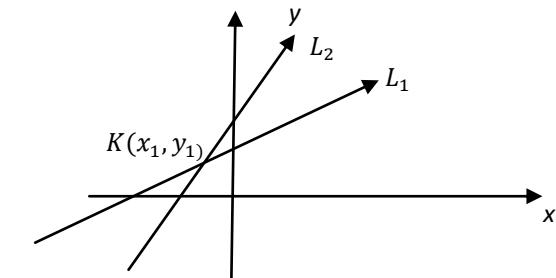
a) $2e^2$ b) e^2 c) e d) $2e$ e) $1 + e$

Cevap: b

8. $L_1: x - 2y + 3 = 0$

$L_2: 3x - y + 4 = 0$

$L_1 \cap L_2 = K(x_1, y_1) \Rightarrow x_1 + y_1 = ?$



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

Cevap: c

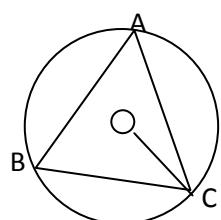
9.

I.	II.
28763	ULBKR
31920	ACBKE
04769	REMBK
05927	EMRAU
93176	USRAB

ise, $28764 = ?$

- a) ABULC b) ACBKL c) ALKBC d) ACALK e) EUKBK

10. $m(\widehat{BCO}) = 40^\circ$
 $m(\widehat{BAC}) = ?$



- a) 35 b) 40 c) 45 d) 50 e) 55

Cevap: d

11.

	1	2	3
4	4	8	P
5	5	R	15
6	5	12	13

Yukarıdaki tabloda sayılar belirli bir kurala göre yazılmıştır.
Buna göre, $P + R = ?$

In the table above the numbers are written according to a rule.

Accordingly, $P + R = ?$

- a) 0 b) 10 c) 16 d) 20 e) 22

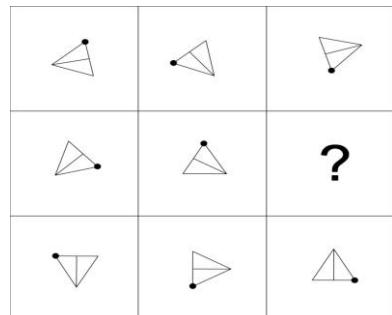
12. Aşağıdaki şekillerden hangisi farklıdır?

Which one of the following figures is different?

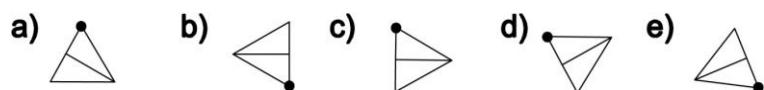


Cevap: b

13.



Soru işaretü “?” olan yere aşağıdakilerden hangisi gelmelidir?
Which one of the following shapes does the question mark stand for?



Cevap: d