



# GAÜNYÖS 2022

A

## ADAY ÖĞRENCİNİN / CANDIDATE STUDENT

ADI / NAME / الاسم : .....

SOYADI / SURNAME / : الكنية .....

İMZA / SIGNATURE / : التوقيع .....

### GENEL SINAV AÇIKLAMALARI

I. Bu sınavdaki soruların nasıl cevaplanacağı, testlerin başında açıklanmıştır. Soruları cevaplamaya başlamadan önce bu açıklamaları dikkatle okuyunuz.

II. Sınavda toplam 80 soru bulunmaktadır. Verilen toplam süre 120 dakikadır.

III. Bu testlerdeki her sorunun bir tek doğru cevabı vardır. Bir soru için birden çok cevap yeri işaretlenmişse, o soru yanlış cevaplanmış sayılacaktır.

IV. Cevaplarınızı koyu siyah ve yumuşak bir kurşun kalemlle işaretleyiniz. İşaretlerinizi cevap yerinin dışına taşırmayınız. Tükenmez kalem veya dolma kalem kullanmayınız.

V. Değiştirmek istediğiniz bir cevabı, yumuşak bir silgiyle cevap kâğıdını örselemeden, temizce siliniz ve yeni cevabınızı işaretlemeyi unutmayın.

VI. Cevap kâğıdınızı buruşturmayınız, katlamayınız ve üzerine gereksiz hiçbir işaret koymayınız.

VII. Bu test puanlanırken, yanlış cevaplarınızın sayısı doğru cevaplarınızı etkilemeyecektir.

VIII. Sınavda uyulacak diğer kurallar bu kitapçığın arka kapağında belirtilmiştir. Bu kuralları dikkatlice okuyup uygulamanız sınavınızın geçerli sayılması için gereklidir.

### GENERAL EXAM INSTRUCTIONS

I. The instructions for answering the questions appear at the beginning of the tests. Please read these carefully before beginning.

II. There are 80 questions in the exam. The total duration given is 120 minutes.

III. In these tests there is only one correct answer for each question. If more than one alternative is marked, that answer will automatically be considered wrong.

VI. You should use a soft, black pencil to mark the answer sheet. Completely fill in the circle for the answer you have chosen, but make sure your mark does not go beyond the borders of the circle.  
Do not use any kind of pen.

V. If you wish to change an answer, carefully erase it completely with a very soft eraser. Do not forget to mark your new answer.

VI. Keep the answer sheet flat and do not fold it. Do not make any unnecessary marks on it.

VII. While this test is scored, the number of wrong answers will not affect your correct answers.

VIII. The other regulations concerning the administration of the tests will be found at the back of the booklet. These rules are to be read carefully and applied in order for your exam to be considered valid.

### التعليمات العامة

يوجد في بداية كل اختبار تعليمات حول كيفية الإجابة على الأسئلة . يرجى قراءتها بعناية قبل الإجابة على الأسئلة

هناك 80 سؤال في الامتحان . المدة الممنوحة الإجمالية 120 دقيقة

هناك إجابة واحدة صحيحة لكل سؤال من الأسئلة الموجودة في هذه الاختبارات . إذا تم وضع علامة اختيار على أكثر من إجابة لسؤال ما ، فسيحسب إجابتكم خاطئة

علم إجابتكم بقلم رصاص أسود ولين ، مع مراعاة عدم التظليل خارج المكان المحدد . لا تستخدم قلم جاف أو قلم حبر عادي .

إذا كنت تزيد تغير إجابة ما ، فامحها بشكل تام مستخدماً ممحاة طرية مع مراعاة الحفاظ على الورقة . ولا تنسى وضع علامة للجواب الجدي

لا تقم بتمرير ورقة الإجابة الخاصة بك ، ولا تطويها ولا تضع أي علامات غير ضرورية عليها

لن تؤثر عدد الإجابات الخاطئة على الإجابات الصحيحة في الامتحان .

تم ذكر القواعد الأخرى التي يجب اتباعها في الامتحان على الغلاف الخلفي لهذا الكتيب . اقرأ هذه القواعد بعناية وقم بتطبيقها بشكل دقيق لكي يصبح امتحانكم مقبولاً .



## TEMEL MATEMATİK TESTİ

- 1) Bu test sizin matematik alanındaki becerilerinizi ölçmek için hazırlanmıştır.
- 2) Bu teste 40 soru bulunmaktadır.
- 3) Bu testteki soruların cevapları, cevap kâğıdının Temel Matematik Testi için ayrılmış olan kısmına işaretlenmelidir.
- 3) Bu teste istediğiniz sorudan cevaplamağa başlayabilirsiniz.
- 4) Bu teste cevaplarınızı işaretlerken cevapladığınız soru numarası ile cevap kağıdındaki Temel Matematik Testi alanındaki cevap numarasının aynı olmasına dikkat etmeniz gerekmektedir.

## BASIC MATHS TEST

- 1) This test is prepared to measure your skills in Maths.
- 2) There are 40 questions in this test.
- 3) The answers to the questions in this test should be marked on the part of the Answer Sheet reserved for Basic Maths Test.
- 4) In this test, you can start responding at any question you want.
- 5) In this test, you should pay attention to the question number and the number in answer sheet in Basic Maths Test part to be the same.

## الرياضيات الأساسية

- 1 - لقد تم تصميم هذا الامتحان لقياس مهاراتكم في الرياضيات .
- 2 - يوجد 40 سؤال في هذا الامتحان .
- 3 - يجب أن تظل الأسئلة في القسم المخصص لامتحان الرياضيات من ورقة الإجابة .
- 4 - يمكنك أن تبدأ في الإجابة على أي سؤال تريده في هذا الامتحان .

1.

$$4 - \frac{1 + \frac{2}{3-m}}{3} = 3 \Rightarrow m = ?$$

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

2.

$$\begin{array}{r} a, bc \\ - 0, abc \\ \hline 5,436 \end{array} \Rightarrow a+b+c=?$$

- A) 12  
B) 10  
C) 8  
D) 5  
E) 4

3.  $4^{12}$  sayısının dörtte biri kaçtır?What is one quarter of  $4^{12}$ ?ما هو ربع العدد  $4^{12}$ ؟

- A)  $2^{12}$   
B)  $2^8$   
C)  $4^8$   
D)  $4^3$   
E)  $2^{22}$

4.

$$x \in R, \sqrt{\frac{\sqrt{x}-1}{\sqrt{x}+1}} = \sqrt{x}-1 \Rightarrow x^2-1=?$$

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

5.

$$\left. \begin{array}{l} a, b \in R \neq 0, \\ |a \cdot b| = 3 \cdot b \\ |\frac{a}{b}| = -\frac{a}{4} \end{array} \right\} \Rightarrow b-a=?$$

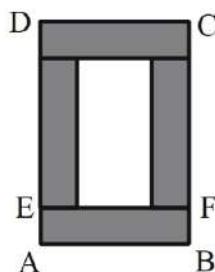
- A) -7  
B) -1  
C) 7  
D) 1  
E) 12

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6. Verilen şekil 4 tane eş dikdörtgenden oluşmuştur.

The figure consists of 4 equal rectangles.

يتكون الشكل المرسوم من 4 مستطيلات متساوية.



$$A(\square ABCD) = 12 \cdot (x^2 - 1)$$

$$|AD| = 4 \cdot (x+1)$$

$$|AE| = ?$$

A)  $\frac{x-3}{2}$

B)  $\frac{x+4}{2}$

C)  $\frac{x+7}{2}$

D)  $\frac{x-5}{2}$

E)  $\frac{6-x}{2}$

7.  $\frac{n^8 + n^4 + 1}{(n^4 - n^2 + 1) \cdot (n^2 + n + 1)} = 6 \Rightarrow n^2 - n = ?$

A) 8

B) -2

C) 6

D) 3

E) 5

8.  $\frac{x-y}{z} = \frac{5}{4}, \quad \frac{y-z}{x} = \frac{1}{10} \Rightarrow \frac{x}{y} = ?$

A)  $\frac{1}{2}$

B) 1

C)  $\frac{3}{2}$

D) 2

E)  $\frac{5}{2}$

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9. 
$$\left. \begin{array}{l} \frac{a}{b} = \frac{c}{d} = \frac{4}{7} \\ \frac{6a+32}{3b+2d} = \frac{8}{7} \end{array} \right\} \Rightarrow d = ?$$

A) 7

B)  $\frac{35}{4}$

C) 14

D)  $\frac{14}{5}$

E) 21

**10.**  $\frac{\frac{3}{5} \cdot \left(x + \frac{7}{2}\right)}{8} = 3 \Rightarrow x = ?$

- A)  $\frac{40}{7}$
- B)  $\frac{25}{3}$
- C)  $\frac{205}{6}$
- D) 63
- E)  $\frac{73}{2}$

**11.**  $\begin{cases} \frac{x+y}{xy} = \frac{1}{5} \\ \frac{x+z}{xz} = \frac{1}{3} \\ \frac{y+z}{yz} = \frac{1}{4} \end{cases} \Rightarrow z = ?$

- A) 3
- B)  $\frac{16}{5}$
- C)  $\frac{85}{12}$
- D)  $\frac{120}{23}$
- E) 6

**12.**  $\begin{cases} \frac{2}{x} = \frac{3}{2y} \\ 9x - y = 33 \end{cases} \Rightarrow y = ?$

- A) 3
- B) 4
- C) 5
- D) 6
- E) 7

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**13.** Bir ürünün etiket fiyatına %20 zam yapıldıktan sonra ürüne % 20 indirim yapılıyor. Buna göre ürünün fiyatı başlangıçtaki fiyatına göre yüzde olarak nasıl değişim gösterir?

A product's price is first increased by 20% and then decreased by 20% in the label price. Accordingly, how does the product's final price change when compared to the initial price?

بعد زيادة سعر المنتج بنسبة 20٪ يتم خفضه بنسبة 20٪، وفقاً لذلك ، كيف يتغير السعر النهائي للمنتج عند مقارنته بالسعر الأولى (ما هي نسبة السعر النهائي من السعر الأولى)؟

- A) +4
- B) -4
- C) 0
- D) +10
- E) -10



14. Bir iş yeri çalışanlarına iki çeşit zam teklifi yapılmıştır:

I. Teklif: Ücretlerin 200 TL artırılması

II. Teklif: Ücretlerin  $\frac{1}{5}$  oranında artırılması

Y TL ücret alanlar I. teklifi, X TL ücret alanlar II. teklifi tercih ederlerse daha karlı olduklarını görüyorlar. Bu bilgilere göre X ve Y hakkında aşağıdakilerden hangisi doğrudur?

Two types of raise offers have been made to employees in a company:

1<sup>st</sup> offer: Increasing the wages by 200 TL,

2<sup>nd</sup> offer: Increasing the wages by  $\frac{1}{5}$ .

Those who earn Y TL are more profitable if they accept 1<sup>st</sup> offer, and those who earn X TL are more profitable if they accept 2<sup>nd</sup> offer. Accordingly, which of the following is true about X and Y?

تمت زيادة رواتب العاملين في أحد أماكن العمل من خلال تقديم عرضين:

العرض الأول: زيادة الراتب بمقدار 200 ليرة تركية

العرض الثاني: زيادة الراتب بنسبة  $\frac{1}{5}$  من راتبه

أصحاب الرواتب الذين يكسبون Y ليرة تركية يكونون أكثر ربحاً إذا قبّلوا العرض الأول، وأصحاب الرواتب الذين يكسبون X ليرة تركية يكونون أكثر ربحاً إذا قبّلوا العرض الثاني. وفقاً لذلك، أي مما يلي ينطبق على X و Y؟

- A)  $Y < 1000 < X$
- B)  $X < 750 < Y$
- C)  $X < 1000 < Y$
- D)  $X = 500 < Y$
- E)  $Y < X < 500$

15.  $a\Delta b = a + (a\theta b) \cdot 5$   
 $a\theta b = a + 6 \cdot b$  }  $\Rightarrow 2\Delta 3 = ?$

A) 112

B) 102

C) 94

D) 82

E) 30

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16.

$$\triangle abcd = ax^3 - bx^2 + cx - d$$

$$\square abcde = ax^4 + bx^3 + cx^2 + dx + e$$

$$\triangle 2020 \cdot \square 20021 = \dots + Ax^5 + \dots$$

$$A = ?$$

A) 0

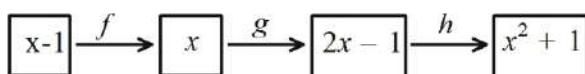
B) 1

C) 2

D) 4

E) -4

17.  $f, g, h: R \rightarrow R$



$$(h \circ f)(2) - (g \circ h)(-1) = ?$$

- A) 2
- B) 3
- C) 4
- D) 5
- E) 6

18.  $a, b, c < 0$

$$P(x) = x^3 + ax + b + 2,$$

$$\frac{P(x)}{0} \Big|_x, \quad \frac{P(x)}{0} \Big|_{x-3}, \quad \frac{P(x)}{0} \Big|_{x-c}$$

$$P[a - 2 \cdot (b + c)] = ?$$

- A) -8
- B) -5
- C) -4
- D) -3
- E) -2

19.

$$A_n = \{x : (-1)^n < \frac{x-1}{n} \leq 3, x \in \mathbb{Z}\}$$

$$\Rightarrow A_1 \cup A_2 = ?$$

- A) { 4 }
- B) { 1, 2, 3, 4 }
- C) { 4, 5, 6, 7 }
- D) { 1, 2, 3, 4, 5, 6, 7 }
- E) { -1, 0, 1, 2, 3 }

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A ve B kümedir.

A and B are sets.

$$\frac{S(A \cup B)}{18} = \frac{S(A)}{9} = \frac{S(A - B)}{4}$$

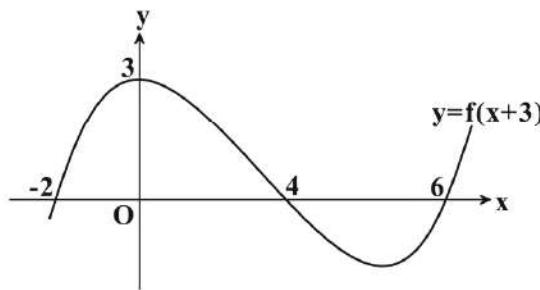
$$S(B - A) = 18, S(A \cup B)' = 5$$

$$S(A' \cup B') = ?$$

- A) 36
- B) 35
- C) 33
- D) 32
- E) 31



21.



$y = f(x + 3)$  fonksiyonunun grafiği verilmiştir. Buna göre  $f(x) = 0$  eşitliğini sağlayan x değerlerinin toplamı kaçtır?

The graph of the  $y = f(x + 3)$  function is given. What is the sum of the x values satisfying  $f(x) = 0$ ?

تم إعطاء التمثيل البياني للدالة  $y = f(x + 3)$ . وفقاً لذلك،  
ما مجموع قيم x التي تحقق  $f(x) = 0$ ؟

- A) -1
- B) 8
- C) 15
- D) 17
- E) 19

22.

$$\begin{aligned}f: R \rightarrow R, f(4x) - 3f(x) &= 2x - 8 \\ \Rightarrow f(7) &=?\end{aligned}$$

- A) 12
- B) 14
- C) 16
- D) 18
- E) 20

23.  $\pi < x < 2\pi$ 

$$\cos x = -\frac{3}{5} \Rightarrow 8 \cdot \cot x + 10 \cdot \sin x = ?$$

- A) 14
- B) 2
- C) -2
- D) -14
- E) 5

24.  $K \in Z, x \in (\pi, \frac{3\pi}{2})$ 

$$K = \frac{3 \cdot \sin x - 1}{2}$$
$$K = ?$$

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

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25.  $f: R - \{1\} \rightarrow R$ 

$$f\left(\frac{x}{x-1}\right) = 2^x \Rightarrow f^{-1}\left(\frac{1}{2}\right) = ?$$

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

- 26.**  $\log 7 = 0,85$  olduğuna göre  $(3430)^{20}$  sayısı kaç basamaklıdır?

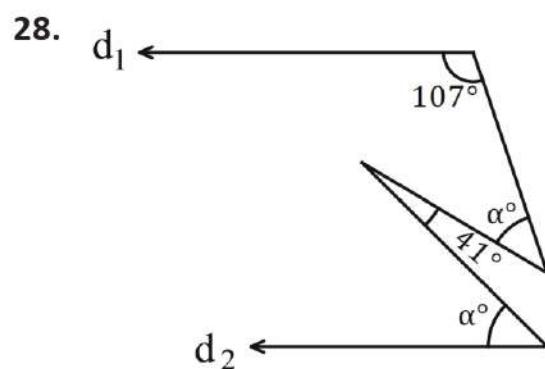
Given that  $\log 7 = 0,85$ , What is the number of digits in  $(3430)^{20}$  ?

بما أن  $\log 7 = 0,85$  ، ماهي عدد مراتب (خانات) العدد  $(3430)^{20}$

- A) 72
- B) 71
- C) 34
- D) 33
- E) 30

**27.**  $\begin{cases} \log_2 x = y \\ \log_{2y} 8 = 3 \end{cases} \Rightarrow x + y = ?$

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



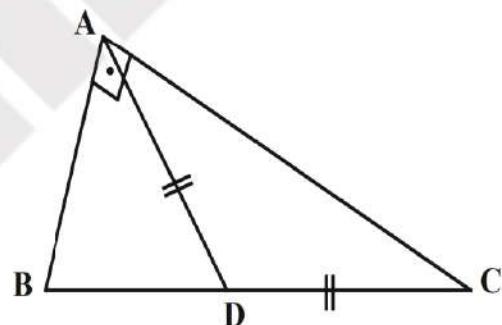
$$d_1 \parallel d_2$$

$$\alpha = ?$$

- A) 68
- B) 39
- C) 48
- D) 63
- E) 57

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- 29.**



$$[AB] \perp [AC]$$

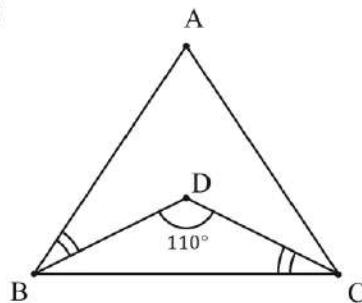
$$m(\angle DAC) = 15^\circ$$

$$|DC| = 6 \text{ cm}$$

$$A(\Delta ABC) = ? \text{ cm}^2$$

- A) 10
- B)  $8 + \sqrt{3}$
- C) 36
- D)  $9 + \sqrt{3}$
- E) 18

30



$$m(\angle ABD) = m(\angle DCB)$$

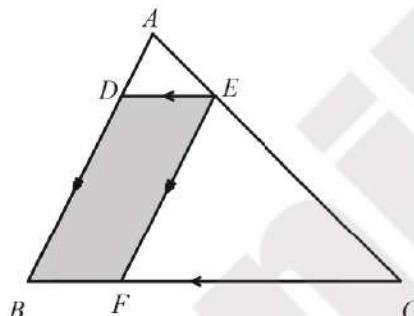
$$m(\angle BDC) = 110^\circ$$

$$|AB| = |AC|$$

$$m(\angle BAC) = x^\circ \Rightarrow x = ?$$

- A) 30
- B) 40
- C) 50
- D) 60
- E) 70

31.



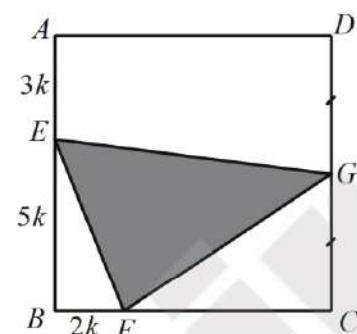
$$\begin{aligned} [DE] &\parallel [BC], \\ [EF] &\parallel [AB], \quad \Rightarrow \frac{A(\square DEF B)}{A(\triangle ABC)} = ? \\ 8 \cdot |AE| &= 3 \cdot |AC| \end{aligned}$$

- A)  $\frac{7}{37}$
- B)  $\frac{15}{64}$
- C)  $\frac{30}{65}$
- D)  $\frac{15}{32}$
- E)  $\frac{48}{121}$

32. ABCD bir karedir.

ABCD is a square.

ABCD هو مربع.



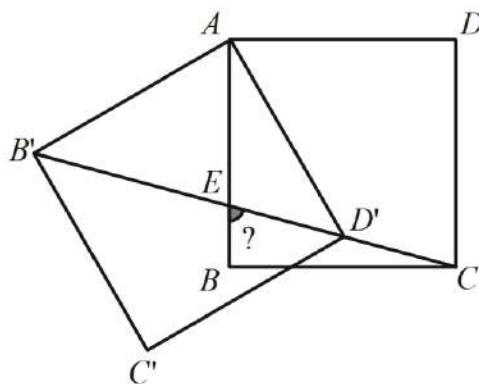
$$|DG| = |GC| \Rightarrow \frac{A(\triangle EFG)}{A(\square ABCD)} = ?$$

- A)  $\frac{19}{64}$
- B)  $\frac{19}{45}$
- C)  $\frac{1}{4}$
- D)  $\frac{5}{32}$
- E)  $\frac{3}{32}$

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33.



Sekilde verilen ABCD karesi A noktası etrafında döndürülerek  $AB'C'D'$  karesi elde ediliyor.  $B', E, D'$  ve  $C$  noktaları doğrusal olduğuna göre  $m(\angle BEC) = ?$

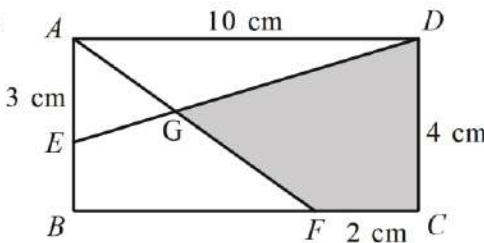
ABCD square in the figure is rotated around vertex A and  $AB'C'D'$  square is obtained.

Given that  $B', E, D'$  ve  $C$  vertices are linear, what is  $m(\angle BEC) = ?$

يتم تدوير مربع ABCD في الشكل حول الرأس A ويتم الحصول على المربع  $AB'C'D'$ . إذا كانت الرؤوس  $B', E, D'$  ve  $C$  خطية، فما هو  $m(\angle BEC) = ?$

- A)  $45^\circ$
- B)  $60^\circ$
- C)  $75^\circ$
- D)  $80^\circ$
- E)  $85^\circ$

34.



ABCD bir dikdörtgendir

ABCD is a rectangle.

ABCD هو مستطيل.

$$|AD| = 10 \text{ cm}, |AE| = 3 \text{ cm},$$

$$|FC| = 2 \text{ cm}, |DC| = 4 \text{ cm},$$

$$A(GFCD) = x \text{ cm}^2 \Rightarrow x = ?$$

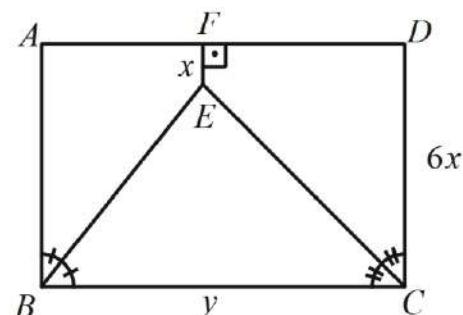
- A)  $\frac{145}{17}$     B)  $\frac{117}{8}$     C)  $\frac{68}{7}$     D) 9    E) 12

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35. ABCD bir dikdörtgendir

ABCD is a rectangle.

ABCD هو مستطيل.



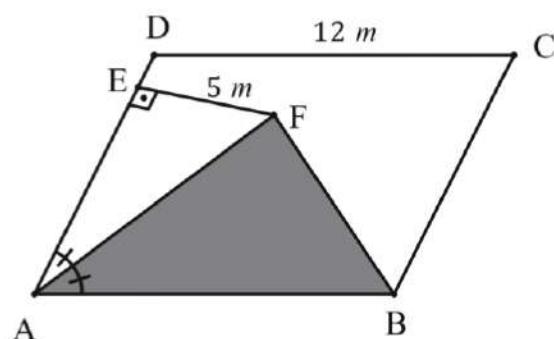
$$\frac{y}{x} = ?$$

- A) 10    B) 6    C)  $\frac{5}{3}$     D)  $\frac{\sqrt{3}}{2}$     E)  $\frac{3}{4}$

36. ABCD paralelkenardır.

ABCD is a parallelogram.

هو متوازي أضلاع.



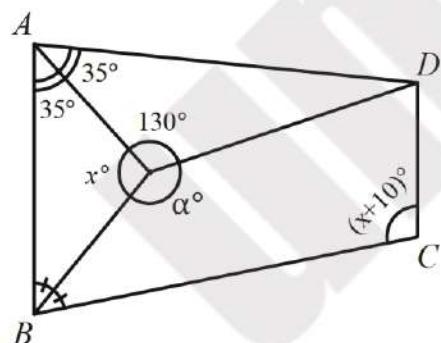
$$A(\Delta AFB) = x \text{ m}^2 \Rightarrow x = ?$$

- A) 30    B)  $\frac{45}{2}$     C) 40    D)  $\frac{65}{2}$     E) 60

37. ABCD yamuktur.

ABCD is trapezoidal

هو شبه منحرف.



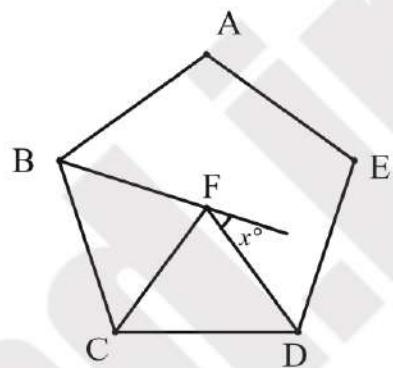
$$\alpha = ?$$

- A) 95    B) 100    C) 110    D) 120    E) 130

38. ABCDE düzgün beşgen, CDF eşkenar üçgendir.

ABCDE is a regular pentagon and CDF is an equilateral triangle.

ABCDEF هو شكل خماسي منتظم و CDF هو مثلث متساوي الأضلاع.



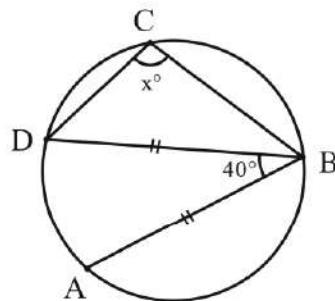
$$x = ?$$

- A) 48    B) 54    C) 60    D) 72    E) 70

39. Verilen çemberde  $|DB|=|AB| \Rightarrow x=?$

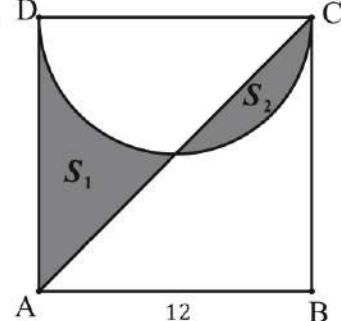
In the given circle  $|DB|=|AB| \Rightarrow x=?$

في الدائرة الوضحة إذا كان  $|DB|=|AB|$  فكم يساوي  $x$ ؟



- A) 100
- B) 110
- C) 120
- D) 130
- E) 140

40. D



ABCD kare, [AC] köşegen ve [CD] yarımdairenin çapıdır. Buna göre taralı alanlar toplamı ( $S_1 + S_2$ ) kaç birim karedir?

ABCD is a square, [AC] is a diagonal, and [CD] is the diameter of the semicircle. Accordingly, what is the sum of the shaded areas ( $S_1 + S_2$ )?

ABCD هو مربع ، و [AC] هو القطر ، و [CD] هو قطر نصف الدائرة. بناء على ذلك ، كم مجموع المساحات المظللة ( $S_1 + S_2$ )

- A)  $36\pi$
- B)  $36\pi - 36$
- C) 36
- D)  $36\pi\sqrt{2}$
- E) 72



## GENEL YETENEK TESTİ

- 1) Bu test sizin soyut düşünme, akıl yürütme ve problem çözme alanlarındaki becerilerinizi ölçmek için hazırlanmıştır.
- 2) Bu testte 40 soru bulunmaktadır.
- 3) Bu testteki soruların cevapları, Cevap Kâğıdının Genel Yetenek Testi için ayrılmış olan kısmına işaretlenmelidir.
- 4) Bu testte istediğiniz sorudan cevaplamameye başlayabilirsiniz.
- 5) Bu testte cevaplarınızı işaretlerken cevapladığınız soru numarası ile cevap kağıdındaki Genel Yetenek Testi alanındaki cevap numarasının aynı olmasına dikkat etmeniz gerekmektedir.

## GENERAL APTITUDE TEST

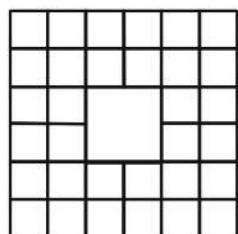
- 1) This test is prepared to measure your skills in abstract thinking, reasoning, and problem solving areas.
- 2) There are 40 questions in this test.
- 3) The answers to the questions in this test should be marked on the part of the Answer Sheet reserved for General Aptitude.
- 4) In this test, you can start responding at any question you want.
- 5) In this test, you should pay attention to the question number and the number in answer sheet in General Aptitude Test part to be the same.

امتحان المهارات العامة

- 1 - لقد تم تصميم هذا الامتحان لقياس مهاراتك في مجال التفكير التجريدي والتحليل المنطقي وحل المشاكل .
- 2 - يوجد 40 سؤال في هذا الامتحان .
- 3 - يجب أن تظل إجابات الأسئلة في القسم المخصص لامتحان المهارات العامة من ورقة الإجابة .

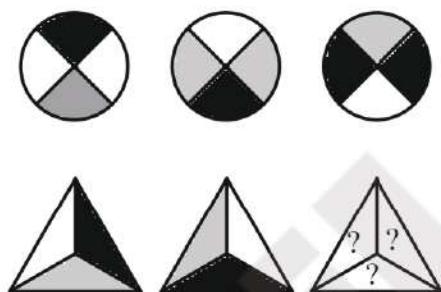
1. Görselde kaç tane kare vardır?

How many squares are there in the image?  
كم عدد المربعات في الصورة؟



- A) 67
- B) 70
- C) 75
- D) 78
- E) 81

2.



- A)
- B)
- C)
- D)
- E)

3.

I.	
II.	
III.	

- A)
- B)
- C)
- D)
- E)

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4.

GNUA		3582
AUGN		8352
NGUA		5283
UANG		2583
ANUG		3825

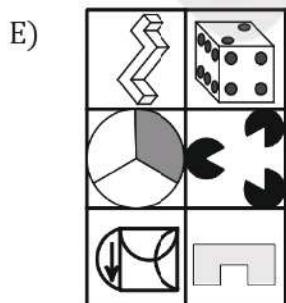
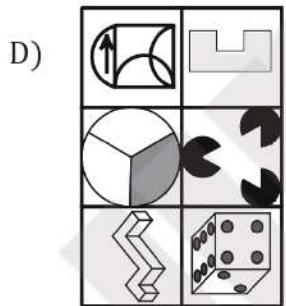
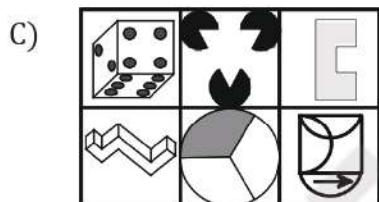
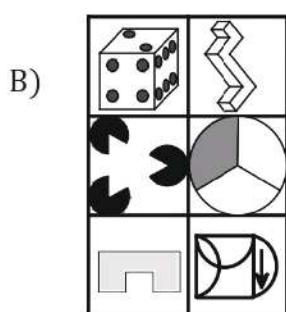
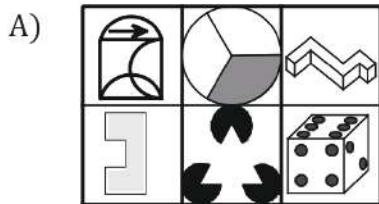
GAUN=?

- A) 2538
- B) 2385
- C) 3258
- D) 5238
- E) 8523

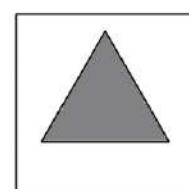
5. Verilen görsellerden hangisi diğerlerinden farklıdır?

Which of the images is different from the others?

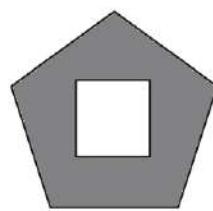
أي من الصور المقدمة تختلف عن الصور الأخرى؟



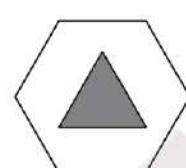
- 6.



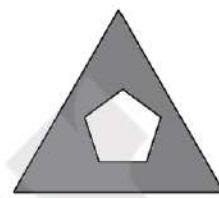
9



15



15



?

A) 5

B) 8

C) 10

D) 12

E) 15

GAÜNYÖS 2022

- 7.

HE	$\rightarrow$	$\otimes \odot$
TA	$\rightarrow$	$\oslash \nabla$
MR	$\rightarrow$	$\ominus \Delta$
SA	$\rightarrow$	$\oslash \oplus$
RE	$\rightarrow$	$\otimes \oslash$
?	$\rightarrow$	$\ominus \oslash$

A) HS

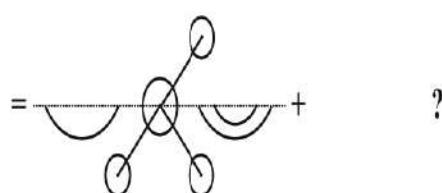
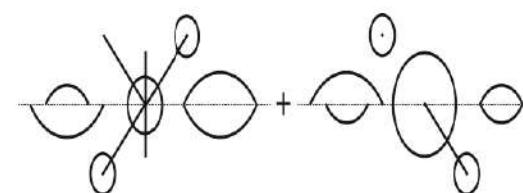
B) EA

C) RS

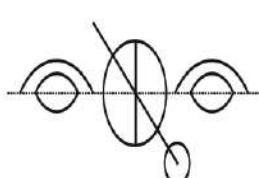
D) AH

E) AR

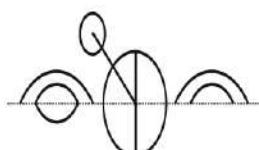
8.



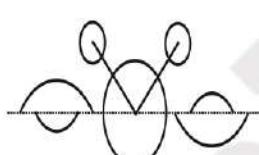
A)



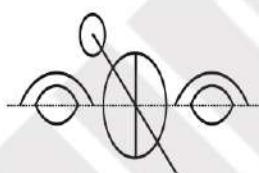
B)



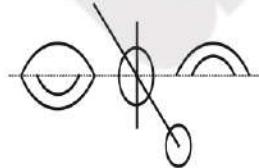
C)



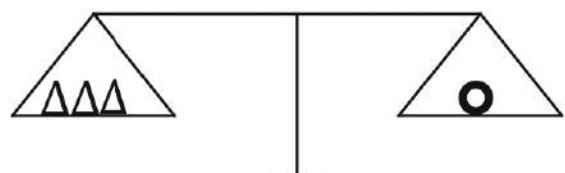
D)



E)



9.



$$\text{pentagon } \times 2 = \Delta \times ?$$

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A) 12

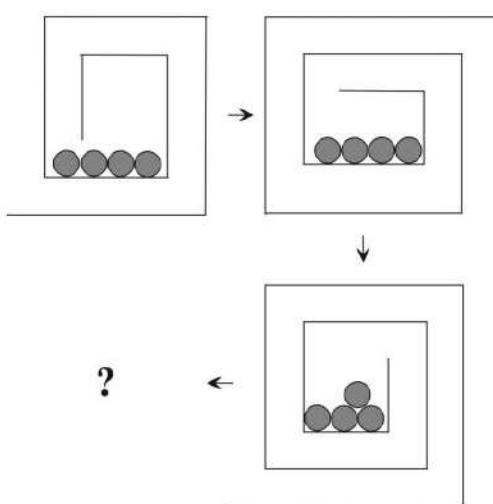
B) 11

C) 10

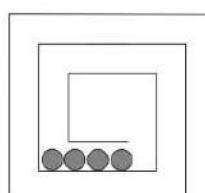
D) 9

E) 8

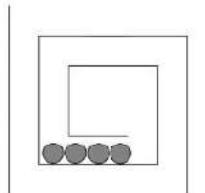
10.



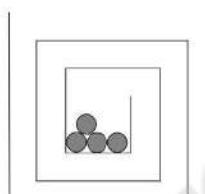
A)



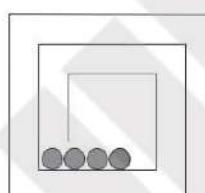
B)



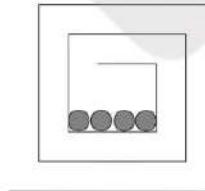
C)



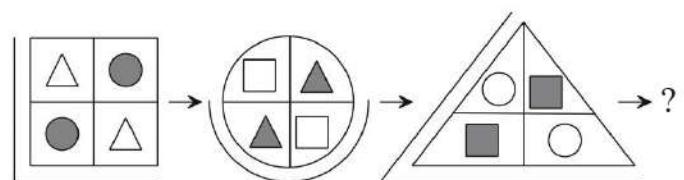
D)



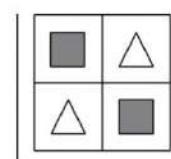
E)



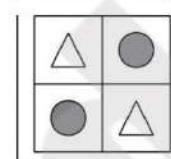
11.



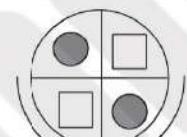
A)



B)



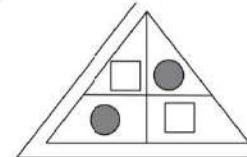
C)



D)



E)



GAÜNYÖS 2022

12.

<b>x</b>	c	b
c	k	m
b	m	n

$$c + b = 8$$

$$k + m + n = y - m$$

$$\Rightarrow y = ?$$

- A) 16  
 B) 36  
 C) 48  
 D) 60  
 E) 64

13.

θ	□	○	↙
□		○○	○○○○
○	○○		
↙	○○○		

$$\text{○ } \theta \text{ } \swarrow = ?$$

- A) ○○  
 B) ○○○  
 C) ○○  
 D) ○○○  
 E) ○○○○○

14.

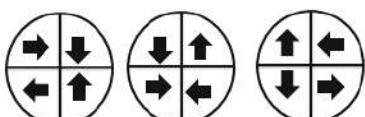
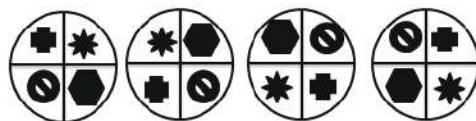
$$\begin{array}{c} \bullet \bullet \\ \square \square \end{array} = \boxed{\square \square \square \square \square}$$

$$\begin{array}{c} \square \square \\ \triangle \triangle \end{array} = \boxed{\triangle \triangle \triangle \triangle}$$

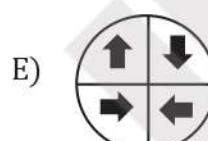
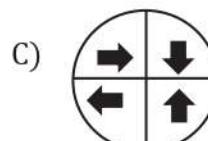
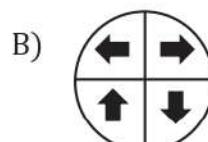
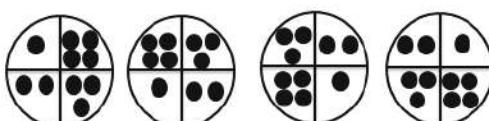
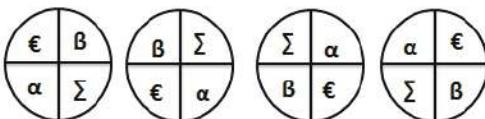
$$\begin{array}{c} \bullet \square \\ \square \end{array} = ?$$

- A)   
 B)   
 C)   
 D)   
 E)

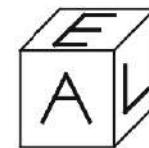
15.



?



16.



Verilen küpün açılımı aşağıdaki seçeneklerden hangisi olabilir?

Which of the followings is the expansion of the given cube?

أي مما يلي هو توسيع المكعب المحدد؟

