PROVE UFFICIALI DEGLI ANNI PASSATI

# TEST ARCHITETTURA

# 2017

IN INGLESE

## PROVA UFFICIALE MUR

Il testo originale della prova

**Ministero dell'Istruzione, dell'Università e della Ricerca**

# PROVA DI AMMISSIONE AI CORSI DI LAUREA E DI LAUREA MAGISTRALE A CICLO UNICO DIRETTAMENTE FINALIZZATI ALLA FORMAZIONE DI ARCHITETTO (IN LINGUA INGLESE)

**Anno Accademico 2017/2018**

## Test di Ragionamento Logico

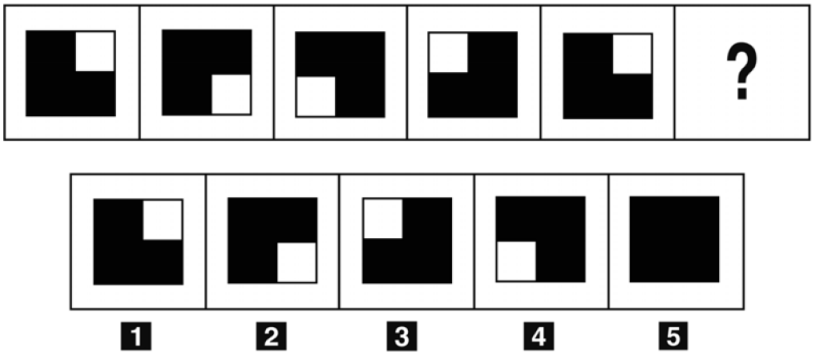
1. **What was the discount percentage if an object that cost 235 euros is sold for 47 euros?**
   A) 80%
   B) 160%
   C) 188%
   D) 94%
   E) 120%

2. **If:**
   **- all mathematicians are precise**
   **- Matteo is keen on cooking**
   **- everyone who is keen on cooking is precise**
   **Which of the following statement will certainly be true?**
   A) Matteo is precise
   B) Anyone who is keen on cooking cannot be a mathematician
   C) Matteo is a mathematician
   D) All mathematicians are keen on cooking
   E) All precise people are keen on cooking

3. **Correctly complete the following sequence, using the Italian alphabet:**
   **R; 127; L; 140; D; 153; ?; ?**
   A) U; 166
   B) V; 169
   C) Z; 166
   D) U; 160
   E) U; 136

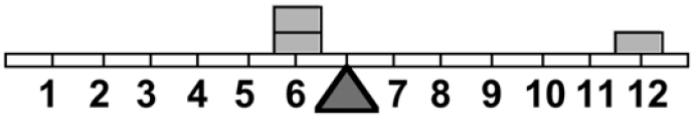
4. **Which, among the terms given, correctly complete the following verbal proportion?**
   **Badminton : X = pasta twist : Y**
   A) X = sport Y = pasta
   B) X = tennis Y = pot
   C) X = shuttlecock Y = meat sauce
   D) X = athlete Y = a strand of spaghetti
   E) X = ball Y = kitchen

**5. Find the figure that correctly completes the series.**



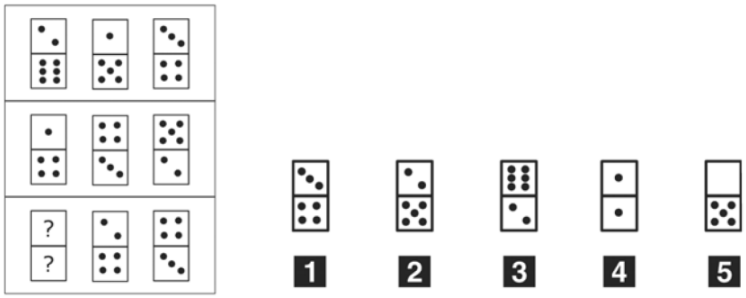

A) Figure 2
B) Figure 3
C) Figure 1
D) Figure 4
E) Figure 5

**6. In order to balance the system in the figure, it is necessary to move a token:**



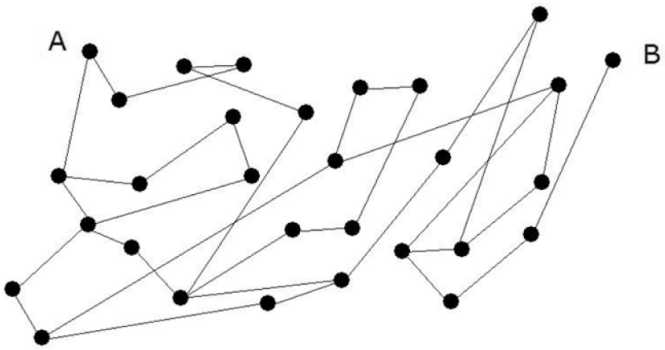

A) from position 6 to position 2
B) from position 6 to position 4
C) from position 12 to position 9
D) from position 12 to position 7
E) none of other options is correct: the system is already balanced

**7. Identify the Domino tile, among those proposed, that completes the sequence in the third line.**



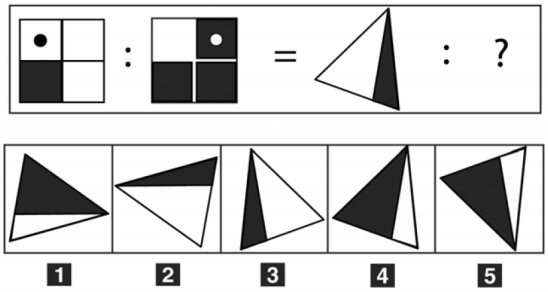

A) Tile 2
B) Tile 1
C) Tile 3
D) Tile 4
E) Tile 5

**8. What is the minimum number of segments that must be covered to go from point A to point B?**



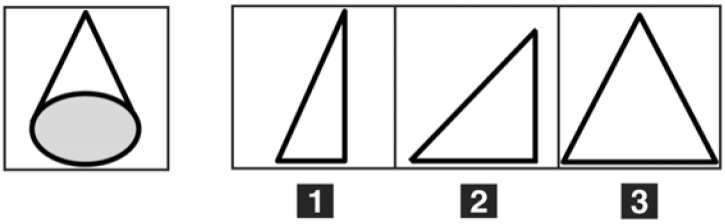

A) 10
B) 15
C) 14
D) 13
E) 12

**9. Which one of the given figures correctly completes the proportion?**




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

**10. Which of the following triangles, revolving around one of its sides, could have created the cone in the figure?**




A) Triangle 1
B) Triangle 2
C) Triangle 3
D) Triangles 1 and 3
E) Triangles 2 and 3

**Passage 1**

*Read the passage and answer the related questions on the basis of its contents and not of any knowledge you might have of its subject.*

At the end of 1504, Raphael, seeking major public commissions, arrived in Florence at the home of the gonfalonier of the Republic, Pier Soderini, with a proper letter of recommendation. It had been written on the first of October by the sister of the Duke of Urbino, Guidobaldo da Montefeltro, Giovanna Feltria, the Duchess of Sora, widow of Giovanni Della Rovere, lord of Senigallia and prefect of Rome. Although Soderini could not avoid reading those lines carefully, Raphael was not granted the prestigious commissions that he had hoped for from the Florentine Republic. However, he had the opportunity to stay in Florence during one of the most fertile, intense and fascinating periods in the city's history. The undisputed protagonists of this fortuitous and lively season were Leonardo and Michelangelo who, like others, had returned to Florence in search of the coveted opportunities that Soderini appeared to dispense. Bearing the letter of Giovanna Feltria to the gonfalonier in Palazzo Vecchio, Raphael would certainly have stopped in Piazza della Signoria to admire Michelangelo's David, an emblem of Republican intelligence, placed on the "balustrade" in front of the palace a little earlier, on 8 September 1504. Once inside, someone would certainly have shown him the wall in the majestic Salone del Gran Consiglio where Leonardo and Michelangelo were soon expected to paint the frescos the *"Battle of Anghiari"* and the *"Battle of Cascina"*; a vain hope, given that – as is well known – only the sketches of the two great projects were completed, which also influenced Raphael's education. Finally, some time later, someone may have accompanied the artist to see the *"Universal Judgement"*, the fresco by Fra Bartolomeo and Mariotto Albertinelli in the monastery of San Marco, of which Fra Girolamo Savonarola had been prior.

(from: *"Raphael"*, Elena Capretti, Giunti Editore).

**11. According to the text, Raffaello Sanzio went to Florence to: *(see Passage 1)***

A) obtain prestigious public commissions
B) admire the works of Michelangelo and Leonardo
C) meet Girolamo Savonarola
D) deliver a letter of Pier Soderini
E) accompany Giovanna Feltria, Duchess of Sora

**12. According to the content of the text, why was Raphael's stay in Florence so profitable? *(see Passage 1)***

A) Because Raphael was able to come into contact with the work of artists of great calibre such as Michelangelo and Leonardo
B) Because Raphael helped strengthen the political bond between the gonfalonier Soderini and the Duchy of Urbino
C) Because Raphael was able to admire the splendour of Palazzo Vecchio in order to deliver a letter
D) Because Raphael became acquainted with Fra Bartolomeo and Mariotto Albertinelli in the monastery of San Marco
E) Because Raphael, delivering a letter to Florence, was assured of the favour and political protection of the Duchy of Urbino

**13. According to the text, what was the symbol of Republican intelligence? *(see Passage 1)***

A) The David
B) The Battle of Anghiari
C) The Battle of Cascina
D) The Universal Judgement
E) Leonardo

**14. According to the text, Giovanna Feltria's letter: *(see Passage 1)***

A) was of no help to Raffaello Sanzio, since he was not given an appointment
B) was decisive for Raffaello Sanzio, since it enable him to personally get to know Leonardo and Michelangelo
C) was of no help to Raffaello Sanzio, since Solderini read it without paying much attention
D) was of no help to Raffaello Sanzio, since it was written by the Duchess, who had much less political power and influence that her brother Guidobaldo
E) was decisive for Raffaello Sanzio because, while he delivered it, he was able to witness the creation of the fresco *"The Battle of Anghiari"*

**15. According to the text, which of the following works was influential in Raphael's artistic formation? *(see Passage 1)***

A) The *"Battle of Cascina"*
B) The *"Universal Judgement"*
C) The David
D) Piazza della Signoria
E) The frescos in the Salone del Gran Consiglio

**Passage 2**

*Read the passage and answer the related questions on the basis of its contents and not of any knowledge you might have of its subject.*

The commission to paint a fresco of the Resurrection on the rear wall of the Sistine Chapel probably dated from 1533; but it was not until three years later that Michelangelo, released by a papal bull from commitments to the heirs of Julius II for the entire time required for the new enterprise, set to work. Unlike the vault, it would no longer be painted architecture as a way of connecting the constructed space to the stories shown in frescos: indeed, the lunettes painted in 1512 were destroyed, together with the underlying "*Assumption*" by Perugino, in order not to limit a space of representation with an architectural framework, not to act as a reported painting. In this way, the wall is like a huge blank page, as were the counter-facades of medieval churches. This is not the synthesis of the arts, the ancient and the modern: human history ends with the imperious gesture of Christ the Judge, unappealable arbiter of good and evil, salvation and eternal grace. These are the themes that led to the ecumenical Christian schism which, at that time, could no longer be considered as a dispute between an ignorant German Augustine monk and the learned papal theologians: the Sack of Rome in 1527 had shown how much appeal Lutheran preaching had, how the widespread hatred for Rome and its pontiff could come to violate the Eternal City, its monuments, until then studied, its relics venerated. [...]

On first sigh, the "*Judgement*" does not seem to have any structure, being almost the formless product of an explosion: groups of figures swirl around Christ the Judge, isolated in a bright halo, leaving much empty space for the deep blue sky. Later, it is realised that the deep blue followed a circular course, starting at the left, from where the elects slowly ascend upwards, drawn by the divine gesture, while Christ's left arm signals the casting down, on the other side, of the damned. All therefore revolves around the figure of God the Judge, Nomos, Law, towards which the gazes of the saints, the Virgin's timid gesture of intercession and the onerous instruments of the Passion agitated threateningly by the angels. As in the sacred oratory, everything is held together only by an unrelenting pace: there is no perspective or colour combination, the clusters of the naked figures come together and separate, they stretch and touch, undergoing the twin forces of attraction of high to low, of sky to earth, of Christ and the Inferno, arranged along spatial axes diverging from the great central void, but coordinated by the figure of Christ-Apollo.

(from: *"Michelangelo"*, Bruno Contardi, Giunti Editore).

**16. According to the text, on first impression, the *"Judgement"* appears: *(see Passage 2)***

A) not to have a definite structure
B) has a well-defined layout
C) to reproduce an explosion of colours
D) isolated in a bright halo
E) to have a circular progression

**17. According to the content of the text, in the *"Judgement"*, human history: *(see Passage 2)***

A) ends with the act of Christ
B) ends with the intercession of the Virgin
C) is destined for eternal damnation
D) is destined for the Passion
E) is destined to ascend to the heavens

**18. According to the text, Perugino's *"Assumption"*: *(see Passage 2)***

A) no longer exists
B) is incorporated in the *"Judgement"*
C) is preserved in a church
D) remains unfinished
E) was completed by Michelangelo

**19. According to the text, in the *"Judgment"* everything revolves around: *(see Passage 2)***

A) the subject on whom the gaze of all the saints converge
B) the angels
C) Perugino's *"Assumption"*
D) the vertical axis, of which Paradise and Hell are the vertices
E) the Virgin

**20. According to the text, Michelangelo probably started to paint frescos on the rear wall of the Sistine Chapel in: *(see Passage 2)***

A) 1536
B) 1533
C) 1512
D) 1527
E) 1530

## Test di Cultura Generale

**21. Identify the correct pairing.**

A) Ministry of Interior – Palazzo del Viminale
B) Presidency of the Republic – Palazzo della Farnesina
C) Chamber of Deputies – Palazzo del Quirinale
D) Senate of the Republic – Palazzo Montecitorio
E) Ministry of Foreign Affairs – Palazzo Madama

**22. The musical composition, used as the anthem of the European Union, was written by:**

A) Ludwig van Beethoven
B) Wolfgang Amadeus Mozart
C) Fryderyk Chopin
D) Giuseppe Verdi
E) Richard Strauss

## Test di Storia

**23. Who designed the Royal Palace of Caserta?**

A) Luigi Vanvitelli
B) Ferdinando Fuga
C) Alessandro Galilei
D) Filippo Raguzzini
E) Giuseppe Piermarini

**24. In which year took place the atomic bombardment of Hiroshima and Nagasaki?**

A) 1945
B) 1940
C) 1947
D) 1943
E) 1948

**25. Between June and November 1942, near the Egyptian town of El Alamein, British forces under the command of General Montgomery fought against:**

A) Italian and German forces under the command of Field Marshall E.J. Rommel
B) Italian forces under the command of Benito Mussolini
C) Russian forces under the command of Stalin
D) French forces under the command of General Charles de Gaulle
E) Spanish forces under the command of Francisco Franco

**26. In which of the following time periods was the People's Republic of China established?**

A) 1945 − 1955
B) 1956 − 1968
C) 1915 − 1922
D) 1923 − 1933
E) 1934 − 1944

**27. On 31st March 2016, an internationally renowned figure in architecture and design died who, in Italy, created a number of works such as the *"MAXXI – National Museum of the Arts of the 21st Century"* in Rome and the so-called *"Crooked"* skyscraper of Milan. Who was it?**

A) Zaha Hadid
B) Massimiliano Fuksas
C) Frank O. Gehry
D) Denise Scott Brown
E) Kazuyo Sejima

**28. Which of the following historical events does NOT relate to the period of Italian unification?**

A) The signing of the Treaty of Campoformio
B) The first war of independence
C) The second war of independence
D) The Expedition of the Thousand
E) The Plombières Agreements

**29. What is the name of the work in the figure and who is the artist?**



A) *"Pietà Rondanini"* by Michelangelo Buonarroti
B) *"Pietà Vaticana"* by Michelangelo Buonarroti
C) *"Pietà"* by Donatello
D) *"Pietà di Palestrina"* by Michelangelo Buonarroti
E) *"Pietà"* by Antonello Gagini

**30. What is the name of the work in the figure and who is the artist?**



A) *"Paolina Borghese"* by Antonio Canova
B) *"Hebe"* by Antonio Canova
C) *"Truth Unveiled by Time"* by Gian Lorenzo Bernini
D) Venus de' Medici
E) *"Naiade"* by Antonio Canova

**31. Who is the artist of the work in the figure?**



A) Gian Lorenzo Bernini
B) Michelangelo Buonarroti
C) Antonio Canova
D) Donatello
E) Alessandro Algardi

**32. Indicate the artist and the name of the work in the figure.**



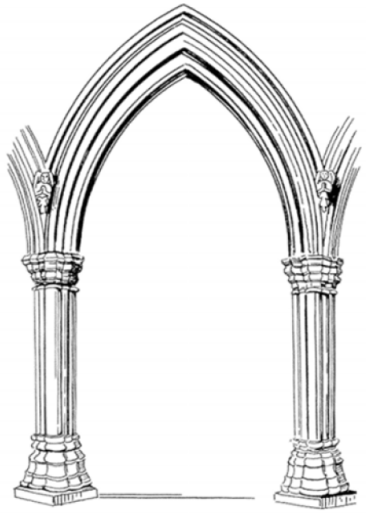
A) *"The Calling of St Matthew"* – Caravaggio
B) *"The Cardsharps"* – Caravaggio
C) *"Girl Interrupted at Her Music"* – Jan Vermeer
D) *"The Triumph of Bacchus (The Drinkers)"* – Diego Velázquez
E) *"Supper at Emmaus"* – Caravaggio

**33. To which period does the work in the figure belong?**



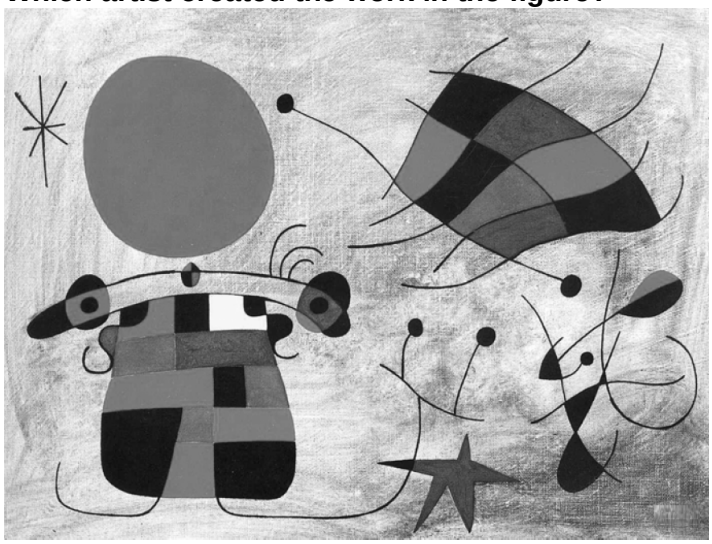
A) Renaissance
B) Mannerism
C) Baroque
D) Neoclassicism
E) Gothic

**34. Of which architectural style is the image in the figure representative?**



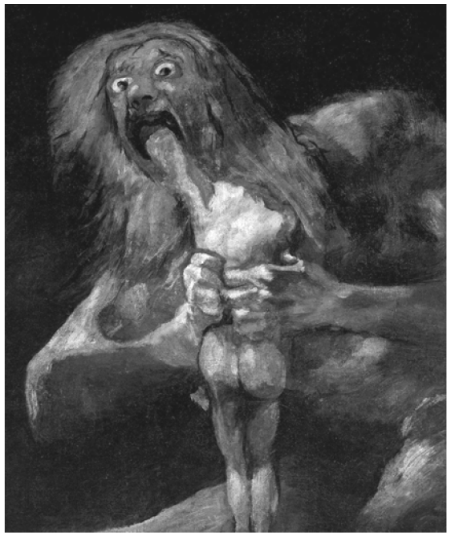
A) Gothic
B) Romanesque
C) Neoclassical
D) Byzantine
E) Baroque

**35. Which artist created the work in the figure?**



A) Joan Miró
B) Salvador Dalí
C) Pablo Picasso
D) Vassily Kandinsky
E) René Magritte

**36. Which artist created the work in the figure?**



A) Francisco Goya
B) Diego Velázquez
C) Eugène Delacroix
D) Rembrandt
E) Pieter Paul Rubens

**37. To which style does the work in the figure belong?**



A) Romanesque
B) Gothic
C) Neoclassical
D) Renaissance
E) Baroque

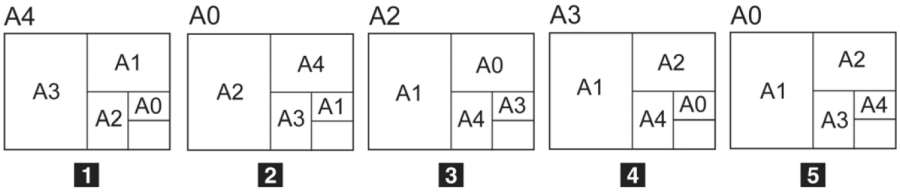
**38. Who designed this important museum?**



A) Frank Lloyd Wright
B) Frank O. Gehry
C) Ludwig Mies van der Rohe
D) Philip Johnson
E) Alvar Aalto

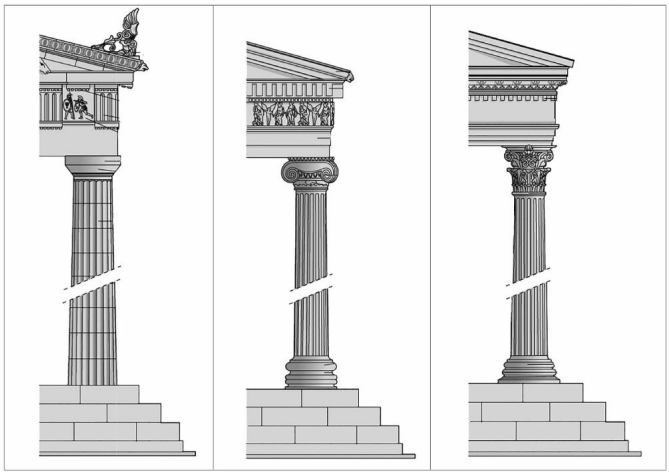
## Test di Disegno e Rappresentazione

**39. Given the formats A0, A1, A2, A3 and A4, what is the correct ratio between their sizes?**




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

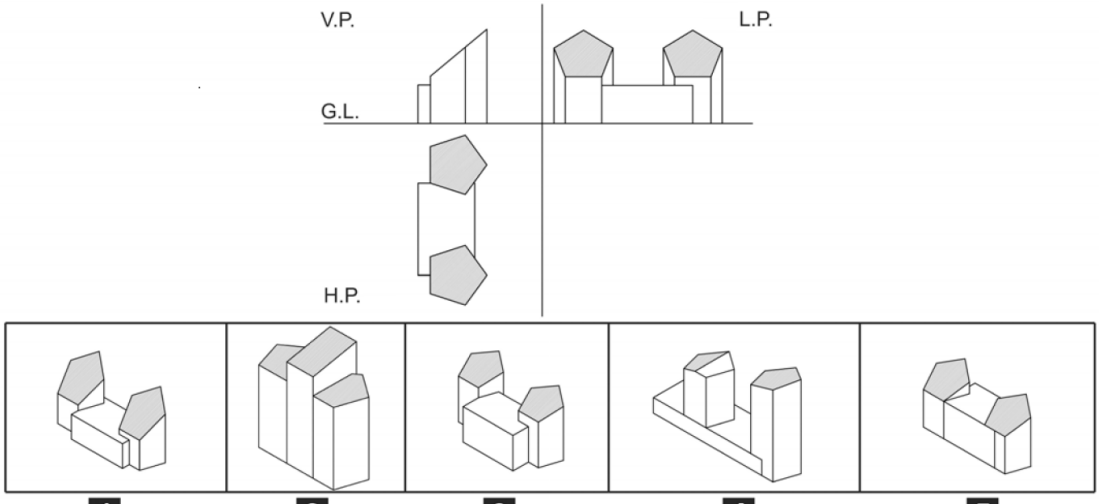
**40. Identify the option that gives the right combination between images and architectural orders.**
**A – Ionic Order B – Doric Order C – Corinthian Order**



**1** **2** **3**

A) 1B, 2A, 3C
B) 1B, 2C, 3A
C) 1A, 2B, 3C
D) 1A, 2C, 3B
E) 1C, 2A, 3B

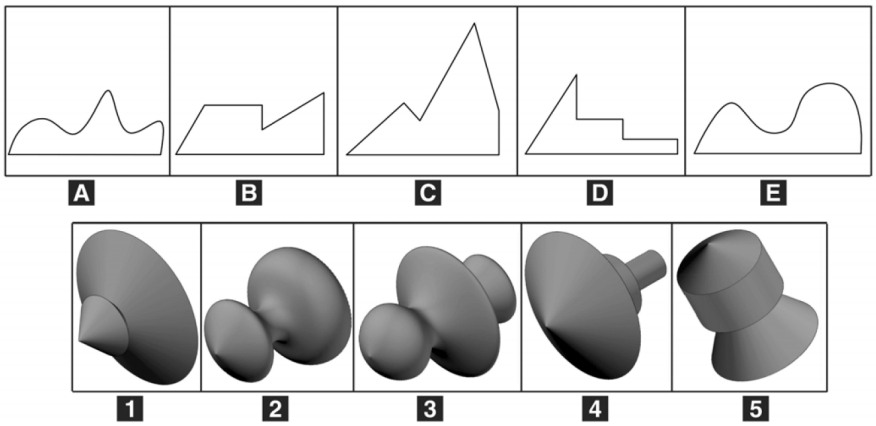
**41. Given the drawing in orthogonal projection, identify the corresponding axonometric projection.**




**1** **2** **3** **4** **5**

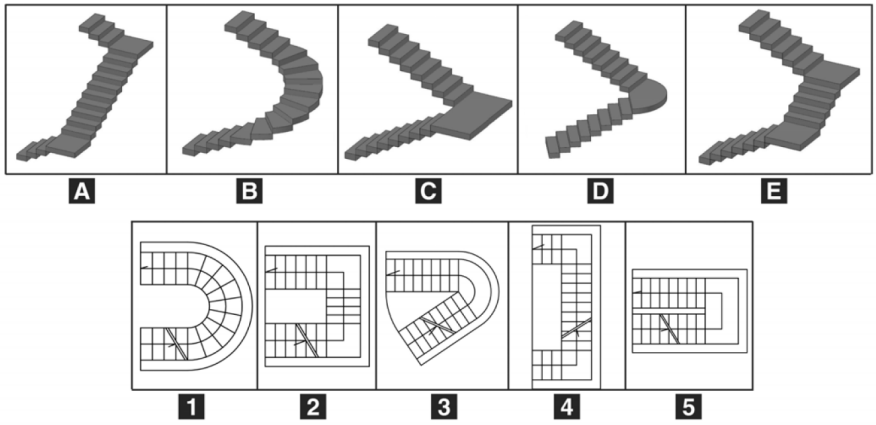
A) 1
B) 4
C) 2
D) 3
E) 5

**42. Establish the correct correspondence with the solids of revolution and the planes represented in the figure.**



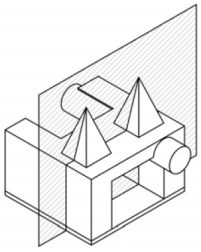

A) 1C, 2E, 3A, 4D, 5B
B) 1A, 2B, 3D, 4E, 5C
C) 1B, 2A, 3E, 4C, 5D
D) 1E, 2B, 3C, 4D, 5A
E) 1A, 2D, 3E, 4C, 5B

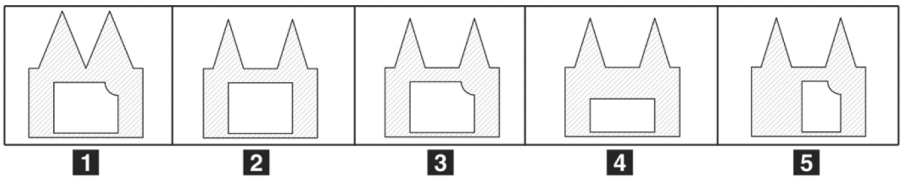
**43. Match the correct 3D model with each plan.**




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

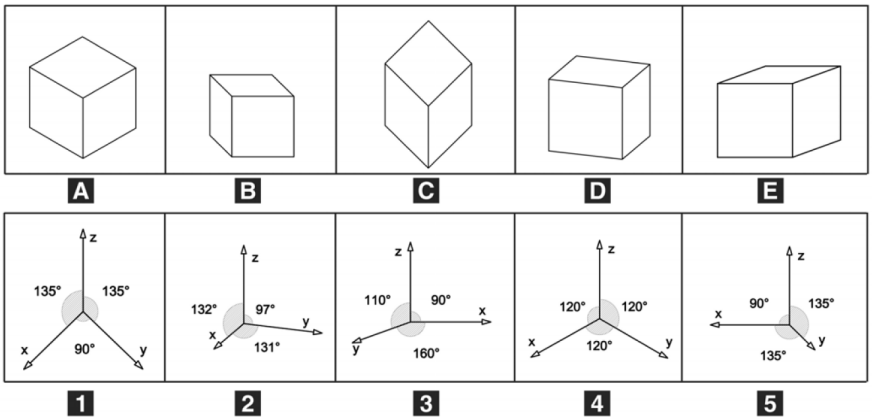
**44. Referring to the plane that divides up the solids represented, which is the correct section?**





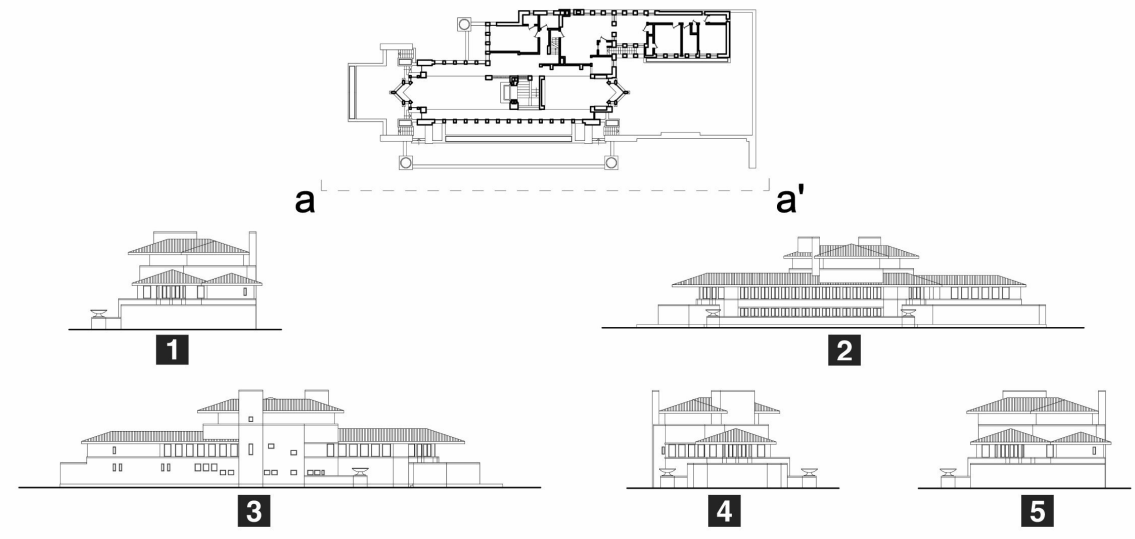

A) 3
B) 5
C) 2
D) 1
E) 4

**45. Match each axonometric projection with the correct set of Cartesian axes.**



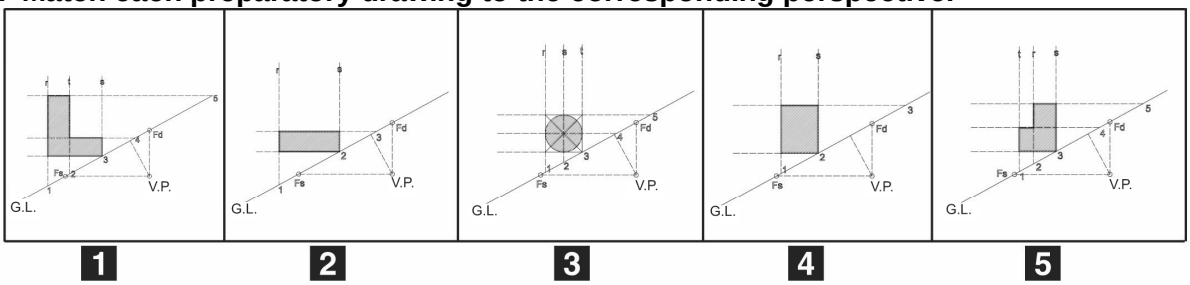

A) 1C, 2D, 3E, 4A, 5B
B) 1A, 2E, 3B, 4D, 5C
C) 1E, 2D, 3A, 4B, 5C
D) 1D, 2E, 3C, 4A, 5B
E) 1B, 2A, 3D, 4C, 5E

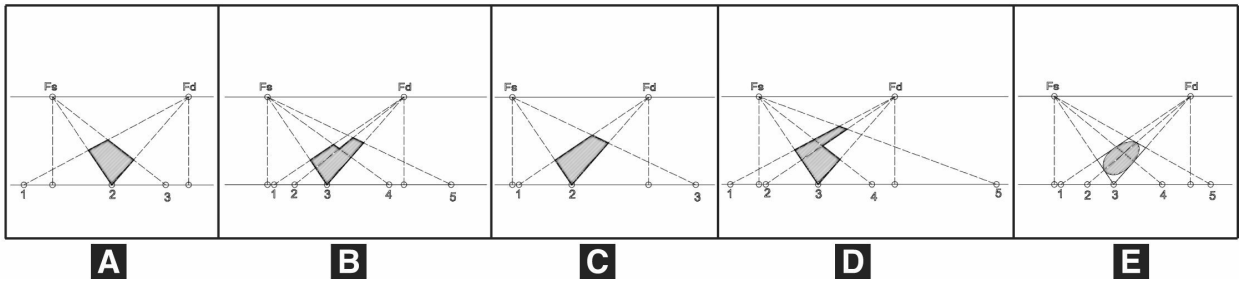
**46. Which of the following prospects corresponds to the a-a' view of the famous Robie House by the architect F.L. Wright?**




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

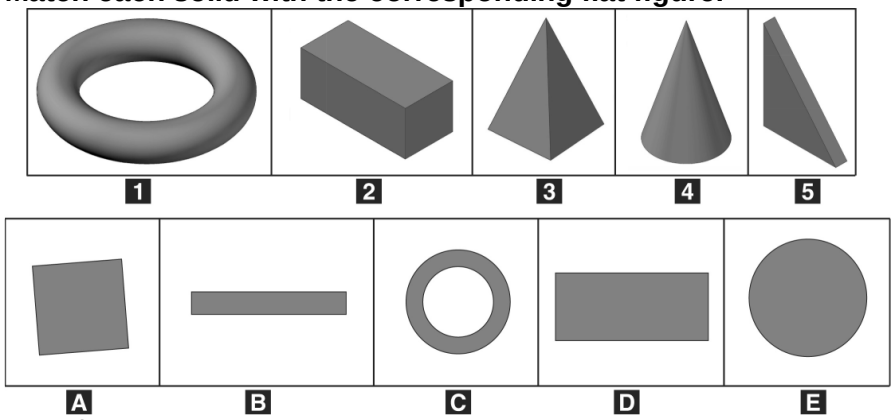
**47. Match each preparatory drawing to the corresponding perspective.**




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

**48. Match each solid with the corresponding flat figure.**




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

## Test di Fisica e Matematica

**49. An aquarium contains 200 litres of water. Given the specific heat of the water is 4,186 J/(kg · K), what is the quantity of energy required to increase the temperature by 1 degree?**

A) 837,200 J
B) Around 600 kJ
C) 14,860 J
D) 328,400 J
E) It is not possible to answer without knowing the aquarium's volume

**50. A barman has to lift a barrel of beer from the floor to the bar counter. Given the barrel has a mass of 40 kg and the counter is 80 cm high, approximately what will be the work carried out by the barman?**

A) 320 J
B) 32 kJ
C) 640 J
D) 512 N
E) 64 J

**51. A child with a mass of 20 kg moves at a speed of 18 km/h sat on a sledge with a mass of 5 kg. What is the total quantity of motion of the child-sledge combination?**

A) 125 kg · m/s
B) 100 N
C) 450 kg · m/s
D) 450 N
E) 360 kg · m/s

**52. A force of 30 N is applied to a mass of 50 decagrams. What is the acceleration of the mass?**

A) 60 $m/s^2$
B) 15 $m/s^2$
C) 0.6 $m/s^2$
D) 30 $m/s^2$
E) 7.5 $m/s^2$

**53. An ohmic conductor with a resistance of 300 Ω is crossed by a current of 80 mA. What will be the voltage applied to the ends of the conductor?**

A) 24 V
B) 24,000 V
C) 3,750 V
D) 3.75 V
E) 0.25 V

**54. The blades of an helicopter are each 2 metres long and rotate 300 times a minute. Calculate the rotation period of the blades.**

A) 0.2 s
B) 5 Hz
C) 0.5 s
D) 0.02 s
E) 2 s

**55. If the sine of an obtuse angle is equal to 4/5, its cosine is:**

A) –3/5
B) 3/5
C) –2/5
D) –1/5
E) 1/5

**56. The maximum value assumed by the function $y = -x^2 + 5x - 4$ is:**

A) 9/4
B) +∞
C) 4
D) 1
E) 5/2

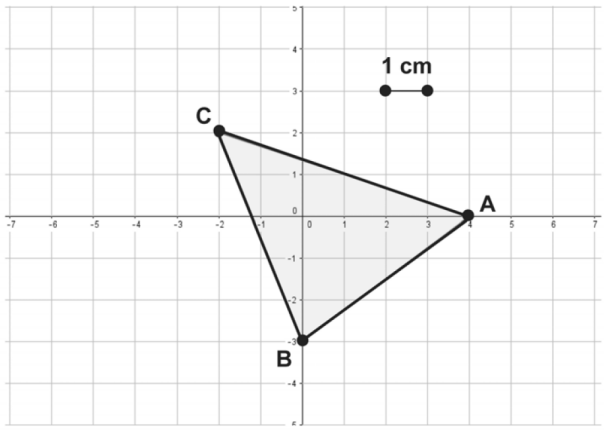
**57. In the set of Real numbers, the equation $x^3 = 4x$ has:**

A) three distinct solutions
B) three solutions, two of which coincide
C) only one solution
D) no solution
E) two solutions

**58. The inequality $(x + 3)/(1 - 2x) > 0$ is satisfied by:**

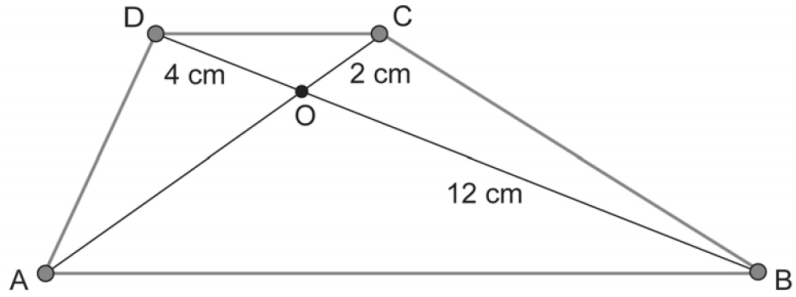
A) $-3 < x < 1/2$
B) $x < -1/2$ or $x > 3$
C) $-1/2 < x < 3$
D) $x < -3$ or $x > 1/2$
E) $x > -3$

**59. What does the area of the triangle ABC in the figure measure?**




A) 13 $cm^2$
B) 15 $cm^2$
C) 12 $cm^2$
D) 14 $cm^2$
E) Insufficient data to determine the area of the triangle

**60. If the diagonals of a trapezium ABCD intersect at point O, forming the segments OB = 12 cm, OC = 2 cm and OD = 4 cm, the segment OA will measure:**




A) 6 cm
B) 8 cm
C) 10 cm
D) 14 cm
E) 24 cm

********** FINE DELLE DOMANDE **********

# In tutti i quesiti proposti la soluzione è la risposta alla lettera A)

TEST ARCHITETTURA 2017

# RIFALLA NELL'APP

2017

Inquadra il QR oppure apri

**app.testbuddy.it**

PROVE UFFICIALI DEGLI ANNI PASSATI

TESTBUDDY.IT