



NOF MATH CHAMPIONS LEAGUE



CLASS 6

PRACTICE SAMPLE PAPERS
4 SETS OF 40 QUESTIONS EACH

FREQUENTLY ASKED QUESTIONS



What is the NOF Champions League?

The NOF Champions League is the most prestigious and highly anticipated competitive exam of the year. This is a paid Level 2 exam where the top students from each country compete against one another.

Who qualifies for the NOF Champions League?

All students who have secured A++ and A+ grades are eligible to participate in the NOF Champions League.

Can any student who pays the fee participate?

NOF Champions League is an INVITATION ONLY event. Only students who have secured A++ and A+ in any subject qualify for that specific subject.

Students from which classes can participate?

Students from Nursery to Grade 10 can participate.

What is the syllabus for the exam?

The syllabus remains the same as it was for Level 1.

How can a child prepare for the Champions League?

Practice question papers will be provided FREE to every participant in the form of an e-booklet. Each e-booklet contains 4 sets of question papers, with 40 questions in each set. The e-booklet will be sent to the child on his/her registered email ID with NOF.

Will there be any negative marking?

Yes, +4 for a Correct and -1 for a Wrong Answer.

Is it mandatory to appear for this exam?

If you want to receive the NCL medal then you have to appear for the examination

Where will the exam be conducted?

It will be an online exam, and students can take it from home using any device (PC/laptop/tablet/mobile phone) with an active front camera.

All the best!

*Because you are the
Best of the Best!*

Q 1. What is the smallest number divisible by both 12 and 18?

- | | |
|--------------|---------------|
| A. 32 | B. 54 |
| C. 72 | D. 108 |

Q 2. Two buses leave a station at the same time. One bus arrives every 20 minutes, and the other every 30 minutes. How long will it take for both buses to arrive at the station together again?

- | | |
|----------------------|-----------------------|
| A. 30 minutes | B. 60 minutes |
| C. 90 minutes | D. 120 minutes |

Q 3. Which of the following represents the year 1987 in Roman numerals?

- | | |
|----------------------|---------------------|
| A. MCMLXXXVII | B. MCMLXXXV |
| C. MCMXCVII | D. MCMLXXXVI |

Q 4. Find the sum of the digits of the largest four-digit number divisible by 27.

- | | |
|--------------|--------------|
| A. 18 | B. 27 |
| C. 36 | D. 45 |

Q 5. A number is divisible by both 9 and 12. Which of the following is always true about the number?

- | | |
|----------------------------------|-----------------------------------|
| A. It is divisible by 36. | B. It is divisible by 18. |
| C. It is divisible by 72. | D. It is divisible by 108. |

*Because you are the
Best of the Best!*

Q 6. Convert 7.25 into a fraction.

- | | |
|-------------------|--------------------|
| A. 720/100 | B. 29/4 |
| C. 145/20 | D. 725/1000 |

Q 7. Simplify $4\frac{4}{5} + 3\frac{3}{10}$?

- | | |
|--------------------------|---------------------------|
| A. $\frac{1}{2}$ | B. $\frac{11}{10}$ |
| C. $\frac{7}{10}$ | D. $\frac{1}{10}$ |

Q 8. Divide 3.6 by 1.2.

- | | |
|---------------|---------------|
| A. 2.4 | B. 3.2 |
| C. 1.2 | D. 3 |

Q 9. A farmer had 120kg of grain. He sold $\frac{2}{3}$ of it and then used $\frac{1}{4}$ of the remainder to feed his livestock. How much grain does he have left?

- | | |
|----------------|----------------|
| A. 20kg | B. 25kg |
| C. 15kg | D. 10kg |

Q 10. A mixture contains milk and water in the ratio 8:5. If the total quantity of the mixture is 78 liters, how much water is in the mixture?

- | | |
|---------------------|---------------------|
| A. 25 liters | B. 30 liters |
| C. 35 liters | D. 40 liters |

*Because you are the
Best of the Best!*

Q 11. The ratio of two numbers is 7:11. If the difference between the numbers is 56, what is the larger number?

- | | |
|---------------|---------------|
| A. 144 | B. 154 |
| C. 160 | D. 172 |

Q 12. A sum of ₹960 is divided between A and B in the ratio 7:5. How much does A get?

- | | |
|----------------|----------------|
| A. ₹420 | B. ₹480 |
| C. ₹560 | D. ₹600 |

Q 13. The ratio of boys to girls in a class is 5:7. If there are 35 boys, how many girls are there?

- | | |
|--------------|--------------|
| A. 42 | B. 44 |
| C. 49 | D. 51 |

Q 14. The length of a rectangle is 8 cm, and its breadth is 6 cm. What is its perimeter?

- | | |
|-----------------|-----------------|
| A. 24 cm | B. 26cm |
| C. 28cm | D. 30 cm |

Q 15. The area of a square is 144 cm^2 . What is its perimeter?

- | | |
|-----------------|-----------------|
| A. 36 cm | B. 48 cm |
| C. 60 cm | D. 72 cm |

*Because you are the
Best of the Best!*

Q 16. A circular garden has a radius of 7 m. What is its area? (Take

$\pi=22/7$)

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| A. | 132 m² | B. | 154 m² |
| C. | 176 m² | D. | 196 m² |

Q 17. The length, breadth, and height of a cuboid are 5 cm, 4 cm, and 3 cm, respectively. What is its volume?

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| A. | 60 cm³ | B. | 70 cm³ |
| C. | 80 cm³ | D. | 90 cm³ |

Q 18. A triangle has a base of 10 cm and a height of 8 cm. What is its area?

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| A. | 20 cm² | B. | 30 cm² |
| C. | 40 cm² | D. | 50 cm² |

Q 19. Solve for x: $3x-7=11$.

- | | | | |
|-----------|------------|-----------|------------|
| A. | x=4 | B. | x=6 |
| C. | x=3 | D. | x=2 |

Q 20. The difference between the squares of two numbers is 39. If the larger number is 8, find the smaller number.

- | | | | |
|-----------|----------|-----------|----------|
| A. | 4 | B. | 5 |
| C. | 6 | D. | 7 |

*Because you are the
Best of the Best!*

Q 21. If $5x+3=2x+12$, what is x ?

- A. 3 B. -3
C. 4 D. 2

Q 22. A shopkeeper sells 3 pens and 5 pencils for ₹35, and 4 pens and 3 pencils for ₹37. Find the cost of one pen and one pencil.

- A. ₹5 (pen), ₹3 (pencil) B. ₹4 (pen), ₹2 (pencil)
C. ₹6 (pen), ₹1 (pencil) D. ₹3 (pen), ₹5 (pencil)

Q 23. The sum of two integers is -7 , and their difference is -3 . What are the integers?

- A. -2 and -5 B. -1 and -6
C. -4 and -3 D. -5 and -2

Q 24. A diver is 10 meters below sea level. He then dives another 15 meters downward. What is his final position relative to sea level?

- A. 10m B. -15 m
C. -25 m D. 5m

Q 25. The temperature at 6 AM was -4°C . By noon, it increased by 9°C . What was the temperature at noon?

- A. -13°C B. -5°C
C. 5°C D. 13°C

*Because you are the
Best of the Best!*

Q 26. A submarine was at a depth of -350m . It ascends 150m . What is its new depth?

- | | |
|--------------------------|--------------------------|
| A. -500m | B. -200m |
| C. 200m | D. -300m |

Q 27. Which of the following polygons does not have rotational symmetry?

- | | |
|--------------------------------|----------------------------|
| A. Equilateral triangle | B. Square |
| C. Regular pentagon | D. Scalene triangle |

Q 28. The radius of a circle is 14cm . What is the length of an arc subtending a 90° angle at the center?

- | | |
|-------------------------|-------------------------|
| A. 11cm | B. 22cm |
| C. 33cm | D. 44cm |

Q 29. A circle has a radius of 10cm . What is the area of a sector with a central angle of 72° ?

- | | |
|-----------------------------|-----------------------------|
| A. 31.4cm^2 | B. 62.8cm^2 |
| C. 78.5cm^2 | D. 157cm^2 |

Q 30. If a regular hexagon has a perimeter of 72cm , what is the length of each side?

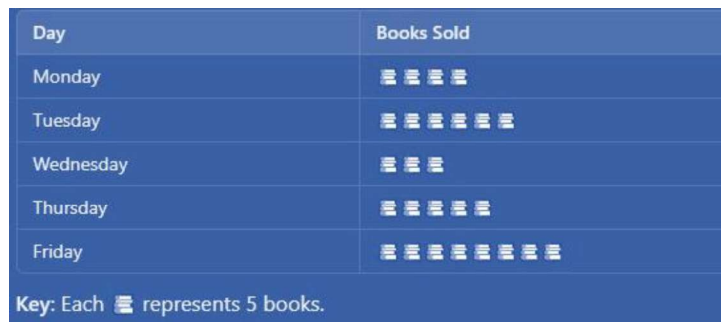
- | | |
|-------------------------|-------------------------|
| A. 6cm | B. 8cm |
| C. 10cm | D. 12cm |

*Because you are the
Best of the Best!*

Q 31. What is the sum of the interior angles of a polygon with 12 sides?

- A. 1800° B. 2160°
C. 1620° D. 1440°

Q 32. The following pictograph shows the number of books sold by a store in a week: What is the total number of books sold in the week?



- A. 90 B. 120
C. 130 D. 150

*Because you are the
Best of the Best!*

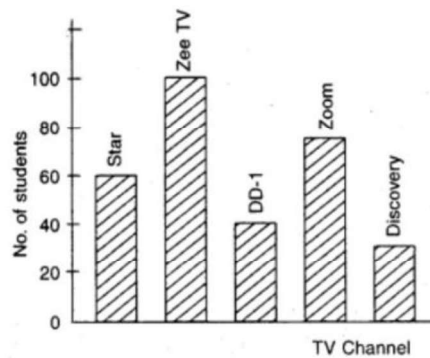
Q 33. In a classroom survey, students' favorite colors were recorded as follows: How many students were surveyed in total?

| Color | Students Represented |
|--------|----------------------|
| Red | ■ ■ ■ ■ ■ |
| Blue | ■ ■ ■ |
| Green | ■ ■ |
| Yellow | ■ ■ ■ ■ |

Key: Each ■ represents 2 students.

- A. 22 B. 24
C. 28 D. 34

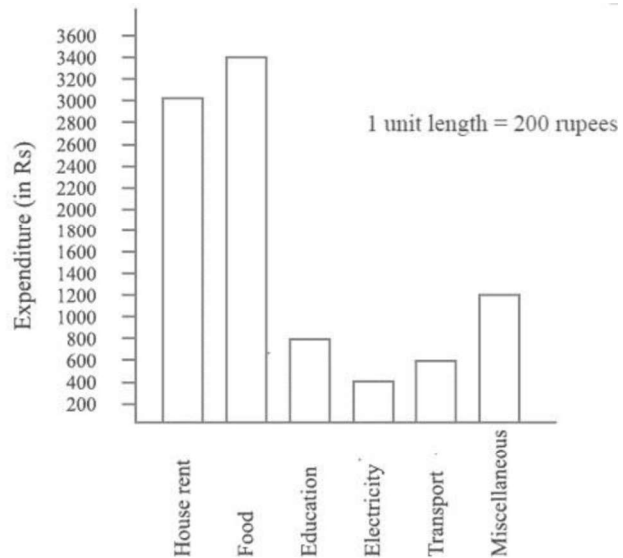
Q 34. How many students like DD-1?



- A. 20 B. 40
C. 60 D. 80

*Because you are the
Best of the Best!*

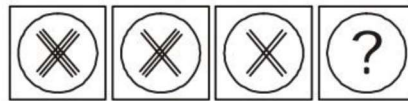
Q 35. How much Rajesh spent on Food and transport?



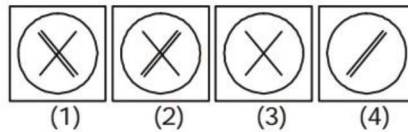
- A. Rs 2000 B. Rs 3000
C. Rs 4000 D. Rs 5000

Q 36. In each of the following questions, which answer figure will come next in the series of question figures?

Question Figures :



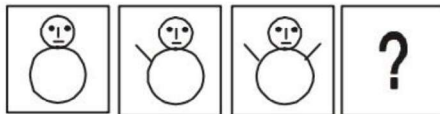
Answer Figures :



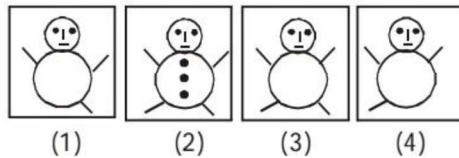
*Because you are the
Best of the Best!*

Q 37. Find the missing figure the series from the given answer figures.

Question Figure :



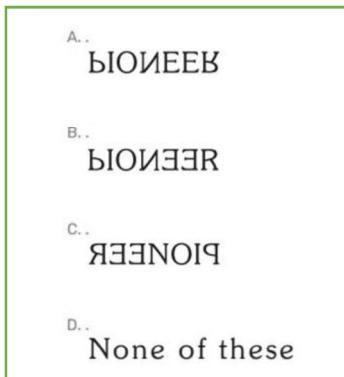
Answer Figures :



- A. 1 B. 2**
C. 3 D. 4

Q 38. What will be the water image of the given figure?

PIONEER

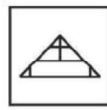
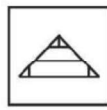
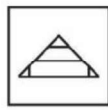
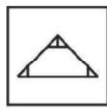
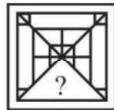


- A. A**
B. B
C. C
D. D

*Because you are the
Best of the Best!*

Q 39. which answer figure will complete the pattern in the question figure?

Question Figures : **Answer Figures :**



(a)

(b)

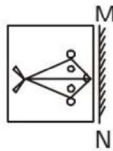
(c)

(d)

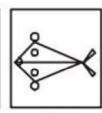
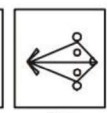
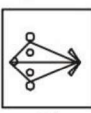
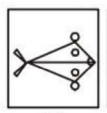
- A. a B. b
C. c D. d

Q 40. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

Question Figure :



Answer Figures :



(1)

(2)

(3)

(4)

- A. 1 B. 2
C. 3 D. 4

SAMPLE PAPER - 1
CLASS 6

NOF MATH
CHAMPIONS LEAGUE

*Because you are the
Best of the Best!*

ANSWER KEY

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| C | B | A | B | A | B | B | D | D | B |
| 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. |
| B | C | C | B | B | B | A | C | B | B |
| 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. |
| A | B | D | C | C | B | D | B | B | D |
| 31. | 32. | 33. | 34. | 35. | 36. | 37. | 38. | 39. | 40. |
| A | C | C | B | C | B | D | A | D | D |

*Because you are the
Best of the Best!*

Q 1. A number leaves a remainder of 3 when divided by 7. What will the remainder be if the square of the number is divided by 7?

- | | |
|-------------|-------------|
| A. 1 | B. 2 |
| C. 3 | D. 4 |

Q 2. What is the difference between the place value of 5 in 52.45?

- | | |
|-----------------|-----------------|
| A. 49.95 | B. 49.90 |
| C. 49.50 | D. 49 |

Q 3. In the number 508742, what is the difference between the place value and face value of 8?

- | | |
|----------------|----------------|
| A. 7991 | B. 7992 |
| C. 7993 | D. 7994 |

Q 4. How many prime numbers are there between 1 and 20?

- | | |
|-------------|-------------|
| A. 6 | B. 7 |
| C. 8 | D. 9 |

Q 5. A number leaves a remainder of 4 when divided by 6. What will the remainder be when the square of this number is divided by 6?

- | | |
|-------------|-------------|
| A. 0 | B. 0 |
| C. 4 | D. 2 |

*Because you are the
Best of the Best!*

Q 6. Convert $11/4$ into a decimal.

- | | |
|-----------------|----------------|
| A. 2.225 | B. 2.25 |
| C. 2.5 | D. 3.25 |

Q 7. If $3/7$ of a number is 12, find the number.

- | | |
|--------------|--------------|
| A. 36 | B. 28 |
| C. 21 | D. 32 |

Q 8. Add 1.75, 2.5, and 3.6.

- | | |
|----------------|----------------|
| A. 7.85 | B. 8.85 |
| C. 8.75 | D. 9.85 |

Q 9. A cyclist covered 27 km in 2.25 hours. What was the cyclist's speed in meters per second?

- | | |
|-------------------|-------------------|
| A. 3.33m/s | B. 12m/s |
| C. 3m/s | D. 3.75m/s |

Q 10. If the ratio of the sides of two squares is 2:3, what is the ratio of their areas?

- | | |
|---------------|---------------|
| A. 2:3 | B. 3:2 |
| C. 4:9 | D. 9:4 |

*Because you are the
Best of the Best!*

Q 11. A recipe requires the ratio of sugar to flour to be 2:5. If 200 g of flour is used, how much sugar is needed?

- | | |
|---------------|---------------|
| A. 60g | B. 70g |
| C. 80g | D. 90g |

Q 12. The ratio of the length to the breadth of a rectangle is 4:3. If the perimeter of the rectangle is 140 cm, what is its length?

- | | |
|----------------|----------------|
| A. 30cm | B. 40cm |
| C. 50cm | D. 60cm |

Q 13. In a library, the ratio of fiction books to non-fiction books is 3:2. If there are 180 fiction books, how many total books are there?

- | | |
|---------------|---------------|
| A. 360 | B. 120 |
| C. 300 | D. 420 |

Q 14. A square and a rectangle have the same perimeter. The side of the square is 10 cm, and the length of the rectangle is 12 cm. What is the breadth of the rectangle?

- | | |
|-----------------|----------------|
| A. 7 cm | B. 8 cm |
| C. 10 cm | D. 5 cm |

Q 15. The base of a triangle is 12 cm, and its height is 8 cm. What is its area?

- | | |
|------------------------------|------------------------------|
| A. 24 cm ² | B. 42 cm ² |
| C. 48 cm ² | D. 96 cm ² |

*Because you are the
Best of the Best!*

Q 16. A cylindrical water tank has a radius of 7 m and a height of 10 m. What is its volume?

- | | |
|-------------------------|-------------------------|
| A. 1,540 m ³ | B. 1,640 m ³ |
| C. 2,200 m ³ | D. 1,760 m ³ |

Q 17. A rectangular swimming pool is 50 meters long and 25 meters wide. Find the cost of fencing it at ₹12 per meter.

- | | |
|-----------|-----------|
| A. ₹900 | B. ₹1000 |
| C. ₹1,500 | D. ₹1,800 |

Q 18. The perimeter of a square is 64 cm. Find its area.

- | | |
|------------------------|------------------------|
| A. 64 cm ² | B. 8 cm ² |
| C. 256 cm ² | D. 400 cm ² |

Q 19. The sum of two numbers is 40. One number is x, and the other is 3x. What is x?

- | | |
|----------|-------|
| A. 10 | B. 15 |
| C. 15.55 | D. 20 |

Q 20. The sum of a number and twice the same number is 45. What is the number?

- | | |
|---------|-------|
| A. 15 | B. 20 |
| C. 22.5 | D. 30 |

*Because you are the
Best of the Best!*

Q 21. If $4x-3=2x+5$, what is x ?

- | | | | |
|-----------|----------|-----------|----------|
| A. | 1 | B. | 2 |
| C. | 3 | D. | 4 |

Q 22. A father's age is three times the age of his son. If the sum of their ages is 48 years, find the age of the son.

- | | | | |
|-----------|-----------|-----------|-----------|
| A. | 12 | B. | 15 |
| C. | 10 | D. | 18 |

Q 23. A student scored -5 points on the first quiz, -8 points on the second quiz, and 12 points on the third quiz. What is the student's total score?

- | | | | |
|-----------|-----------|-----------|-----------|
| A. | -1 | B. | -2 |
| C. | -4 | D. | 0 |

Q 24. A bird is sitting at the top of a tree that is 20 meters tall. It dives down 35 meters to catch a worm. Where is the bird relative to the ground after catching the worm?

- | | | | |
|-----------|------------|-----------|-------------|
| A. | 15m | B. | -15m |
| C. | 5m | D. | -5m |

Q 25. A submarine was at a depth of -450m. It descends 125m further. What is its new depth?

- | | | | |
|-----------|--------------|-----------|--------------|
| A. | -325m | B. | -575m |
| C. | -475m | D. | -350m |

*Because you are the
Best of the Best!*

Q 26. The temperature in a city was -6° in the morning. By afternoon, the temperature rose by 14°C , and then dropped by 9°C in the evening. What was the temperature in the evening?

- | | |
|--------------------------------|--------------------------------|
| A. -2°C | B. -1°C |
| C. 1°C | D. -3°C |

Q 27. If a circle has a circumference of 44cm, what is its radius?

- | | |
|----------------|----------------|
| A. 7cm | B. 8cm |
| C. 21cm | D. 22cm |

Q 28. How many lines of symmetry does a regular octagon have?

- | | |
|--------------|-------------|
| A. 4 | B. 8 |
| C. 12 | D. 2 |

Q 29. A triangle has angles measuring 30° and 90° . What is the measure of the third angle?

- | | |
|------------------------|-------------------------|
| A. 60° | B. 60° |
| C. 30° | D. 120° |

Q 30. The area of a circle is 154cm^2 . Find its radius.

- | | |
|----------------|----------------|
| A. 7cm | B. 8cm |
| C. 10cm | D. 11cm |


*Because you are the
Best of the Best!*

Q 31. Which of the following shapes has no line of symmetry?

- A. Rectangle
- B. Square
- C. Scalene triangle
- D. Equilateral triangle

Q 32. A pictograph shows the number of trees planted in different months: How many more trees were planted in March than January?

| Month | Trees Planted |
|----------|---|
| January |    |
| February |     |
| March |       |

Key: Each  represents 8 trees.

- A. 12
- B. 24
- C. 32
- D. 40

*Because you are the
Best of the Best!*

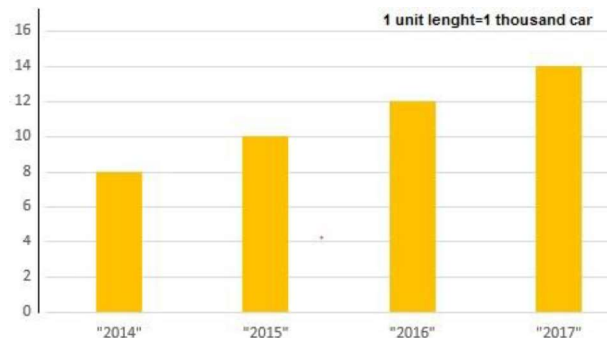
Q 33. A company uses the following pictograph to represent the number of cars sold in 4 cities: Which of the following is incorrect about the data?

| City | Cars Sold |
|---------|---|
| Delhi |    |
| Mumbai |     |
| Kolkata |   |
| Chennai |  |

Key: Each  represents 10 cars.

- A. Kolkata sold 30 cars. B. Kolkata sold 20 cars.
C. Delhi sold 30 cars. D. Chennai sold 10 cars.

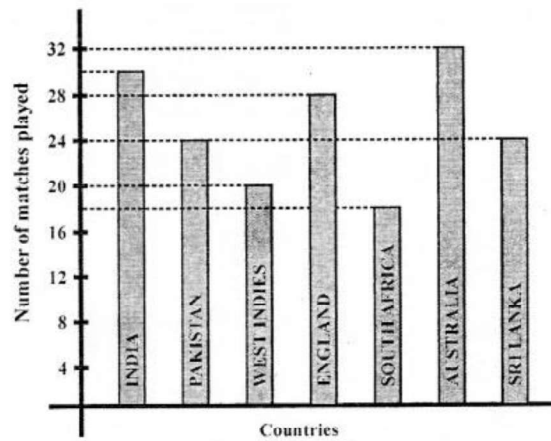
Q 34. The below graph shows the total car in Bangalore city from 2014 to 2017 what is the increase in total car from year 2015 to 2017



- A. 12000 B. 4000
C. 16000 D. 18000

*Because you are the
Best of the Best!*

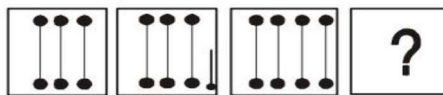
Q 35. How many more matches were played by India than Pakistan?



- A. 6 B. 8
C. 24 D. 28

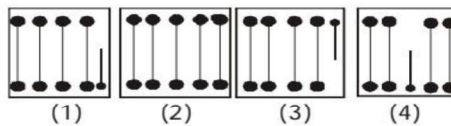
Q 36. find the missing figure the series from the given answer figures.

Question Figures :



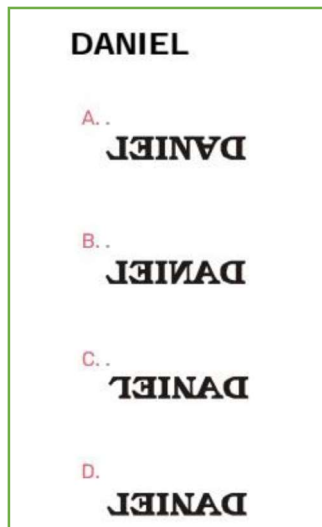
- A. 1
B. 2
C. 3
D. 4

Answer Figures :



*Because you are the
Best of the Best!*

Q 37. Choose the alternative which most closely resembles the mirror-image of the given combination.

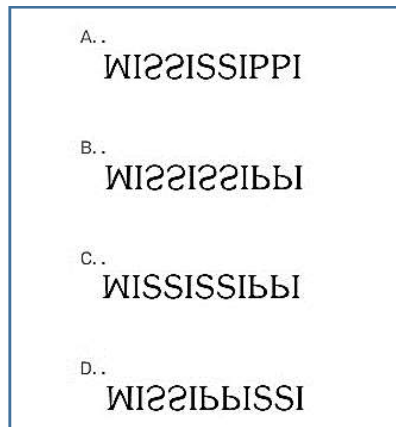


- A. A
- B. B
- C. C
- D. D

*Because you are the
Best of the Best!*

Q 38. What will be the water image of the given figure?

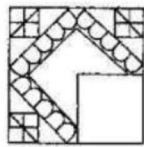
MISSISSIPPI



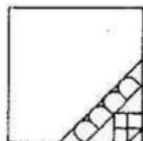
- A. A
- B. B
- C. C
- D. D

Q 39. which answer figure will complete the pattern in the question figure?

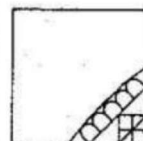
Question Figure : **Answer Figures :**



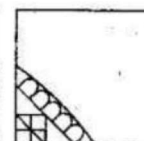
(a)



(b)



(c)



(d)

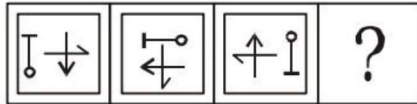
- A. a
- C. c

- B. b
- D. d

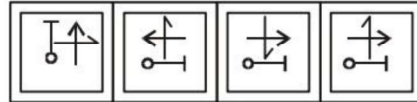
*Because you are the
Best of the Best!*

Q 40. Find the missing figure the series from the given answer figures.

Question Figures :



Answer Figures :



(1)

(2)

(3)

(4)

A. 1

B. 2

C. 3

D. 4

SAMPLE PAPER - 2
CLASS 6

NOF MATH
CHAMPIONS LEAGUE

*Because you are the
Best of the Best!*

ANSWER KEY

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| B | A | B | C | C | B | B | A | A | C |
| 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. |
| C | B | C | B | C | A | D | C | B | A |
| 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. |
| D | A | A | B | B | B | A | B | A | A |
| 31. | 32. | 33. | 34. | 35. | 36. | 37. | 38. | 39. | 40. |
| C | B | A | B | A | A | B | A | C | D |



*Because you are the
Best of the Best!*

Q 1. Convert 2949 to Roman numerals.

- | | |
|-----------------------|--------------------|
| A. MMCMXLV | B. MMCMXLIX |
| C. MMDCCCCXLIX | D. MMCMXLIV |

Q 2. What is the HCF of 48, 72, and 120?

- | | |
|--------------|--------------|
| A. 8 | B. 12 |
| C. 24 | D. 36 |

Q 3. What is the sum of the place values of the digit 5 in the number 65235?

- | | |
|----------------|----------------|
| A. 5050 | B. 5005 |
| C. 5500 | D. 505 |

Q 4. A number leaves a remainder of 3 when divided by 7. What will the remainder be when the cube of this number is divided by 7?

- | | |
|-------------|-------------|
| A. 2 | B. 4 |
| C. 6 | D. 8 |

Q 5. The first three common multiples of 4 and 6 are:

- | | |
|----------------------|----------------------|
| A. 12, 24, 36 | B. 24, 48, 72 |
| C. 6, 12, 18 | D. 12, 36, 48 |

*Because you are the
Best of the Best!*

Q 6. Convert $9/16$ to a decimal.

- | | |
|-----------------|------------------|
| A. 0.625 | B. 0.5625 |
| C. 0.75 | D. 0.85 |

Q 7. Multiply 3.25 and 0.4.

- | | |
|----------------|----------------|
| A. 1.2 | B. 1.3 |
| C. 1.45 | D. 1.25 |

Q 8. Two containers contain water in the ratio 7:9. The first container holds 17.5 liters of water. How much water does the second container hold?

- | | |
|----------------------|----------------------|
| A. 22.5liters | B. 24.5liters |
| C. 27liters | D. 30liters |

Q 9. A piece of cloth 8.4m long is cut into pieces of 0.7m each. How many pieces are there?

- | | |
|--------------|--------------|
| A. 12 | B. 10 |
| C. 11 | D. 14 |

Q 10. The monthly income of A, B, and C is in the ratio 4:5:6. If C's monthly income is ₹54,000, what is A's monthly income?

- | | |
|-------------------|-------------------|
| A. ₹36,000 | B. ₹30,000 |
| C. ₹40,000 | D. ₹45,000 |

*Because you are the
Best of the Best!*

Q 11. If 12 men can complete a task in 15 days, how many days will it take for 10 men to complete the same task, assuming they work at the same rate?

- | | |
|-------------------|-------------------|
| A. 12 days | B. 15 days |
| C. 18 days | D. 21 days |

Q 12. The ratio of the speeds of two cars is 3:4. If the first car travels 240 km, how far does the second car travel in the same time?

- | | |
|------------------|------------------|
| A. 300 km | B. 320 km |
| C. 400 km | D. 180 km |

Q 13. A and B can complete a task in 20 days and 30 days, respectively. If they work together, how many days will they take to finish the task?

- | | |
|-------------------|-------------------|
| A. 12 days | B. 15 days |
| C. 10 days | D. 25 days |

Q 14. A cuboid has a length of 6 cm, breadth of 4 cm, and height of 3 cm. What is its surface area?

- | | |
|------------------------------|------------------------------|
| A. 72 cm^2 | B. 94 cm^2 |
| C. 108 cm^2 | D. 100 cm^2 |

*Because you are the
Best of the Best!*

**Q 15. The area of a rectangle is 96 cm^2 , and its breadth is 8 cm.
What is its length?**

- | | |
|-----------------|-----------------|
| A. 10 cm | B. 12 cm |
| C. 14 cm | D. 16 cm |

Q 16. A cube has a side length of 5 cm. What is its volume?

- | | |
|----------------------------|----------------------------|
| A. 100cm^3 | B. 125cm^3 |
| C. 150cm^3 | D. 175cm^3 |

Q 17. The area of a rectangular garden is 300 m^2 , and its breadth is 12 m. Find its length.

- | | |
|------------------|----------------|
| A. 12.5 m | B. 15 m |
| C. 25 m | D. 30 m |

Q 18. A rectangular park has a length of 80 meters and a breadth of 60 meters. Find the total distance covered if a person jogs around it twice.

- | | |
|-----------------|-----------------|
| A. 200 m | B. 280 m |
| C. 560 m | D. 800 m |

Q 19. Solve for x: $3x - 7 = 11$.

- | | |
|-------------|-------------|
| A. 4 | B. 6 |
| C. 3 | D. 2 |

*Because you are the
Best of the Best!*

Q 20. The perimeter of a rectangle is 72 cm. Its length is 4 cm more than twice its breadth. Write and solve the equation to find the breadth.

- | | |
|---------------------------|--------------------------|
| A. $2(2a+4)+2a=72$ | B. $2(a+2a+4)=72$ |
| C. $2(2a+4+a)=72$ | D. $2(a+4)+2a=72$ |

Q 21. If $x + 2y = 10$ and $3x - y = 9$, find x and y .

- | | |
|----------------------|----------------------|
| A. $x=5, y=5$ | B. $x=3, y=4$ |
| C. $x=4, y=3$ | D. $x=6, y=2$ |

Q 22. The sum of twice a number and 9 is 19. What is the number?

- | | |
|-------------|-------------|
| A. 7 | B. 6 |
| C. 5 | D. 4 |

Q 23. The product of two integers is -48. One of the integers is 8. What is the other integer?

- | | |
|--------------|--------------|
| A. -6 | B. -8 |
| C. 6 | D. 8 |

Q 24. A shopkeeper has 30kg of a specific product in his stock after selling 50kg. How much stock did he originally have?

- | | |
|----------------|----------------|
| A. 20kg | B. 50kg |
| C. 70kg | D. 80kg |

*Because you are the
Best of the Best!*

Q 25. A hiker ascended 250m in the morning and descended 340m in the afternoon. What is the hiker's net change in altitude?

- | | |
|----------------|-----------------|
| A. -90m | B. -110m |
| C. -70m | D. 90m |

Q 26. A bank account has a balance of -200 dollars. If 150 dollars are deposited into the account, what is the new balance?

- | | |
|------------------------|------------------------|
| A. -350 dollars | B. -50 dollars |
| C. 350 dollars | D. -150 dollars |

Q 27. A central angle in a circle measures 120° , and the radius is 21cm. Find the length of the arc subtended by the angle.

- | | |
|----------------|----------------|
| A. 44cm | B. 88cm |
| C. 22cm | D. 77cm |

Q 28. Which of the following has rotational symmetry of order 2?

- | | |
|--------------------------------|---------------------|
| A. Equilateral triangle | B. Rectangle |
| C. Rhombus | D. Circle |

Q 29. A square and a circle have the same perimeter. If the side of the square is 11cm, what is the radius of the circle?

- | | |
|----------------|----------------|
| A. 7cm | B. 14cm |
| C. 28cm | D. 21cm |

*Because you are the
Best of the Best!*

Q 30. A triangle has sides of length 13cm,14cm, and 15cm. What type of triangle is it?

- A. Scalene B. Equilateral
C. Isosceles D. Right-angled

Q 31. A line segment passes through the center of a circle and divides it into two equal halves. What is this line segment called?

- A. Radius B. Diameter
C. Chord D. Tangent

Q 32. A school recorded the number of medals won by its students in two different years:How many more gold medals were won in 2023 compared to 2022?

| Year | Gold Medals Won |
|------|---|
| 2022 |     |
| 2023 |       |

Key: Each  represents 3 medals.

- A. 6 B. 9
C. 12 D. 15

*Because you are the
Best of the Best!*

Q 33. A village represents the daily water consumption (in liters) using the following pictograph: What is the average water consumption per household?

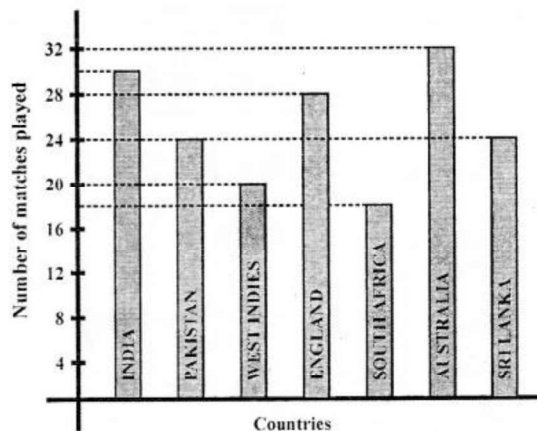
| Household | Water Consumed |
|-------------|----------------|
| Household 1 | ☹☹☹ |
| Household 2 | ☹☹ |
| Household 3 | ☹☹☹☹ |
| Household 4 | ☹ |

Key: Each ☹ represents 25 liters.

- A. 62.5 liters B. 25 liters
C. 50 liters D. 75 liters

Q 34. Ratio of the number of matches played by India to the number of matches played by Sri Lanka is

- A. 4:5
B. 5:6
C. 5:4
D. 7:6



*Because you are the
Best of the Best!*

Q 35. The mean of first 6 odd natural numbers is?

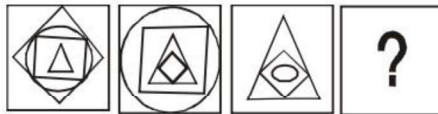
- | | |
|-------------|---------------|
| A. 5 | B. 5.5 |
| C. 6 | D. 6.5 |

Q 36. A chord of a circle is 24cm long, and the perpendicular distance from the center of the circle to the chord is 5cm. Find the radius of the circle.

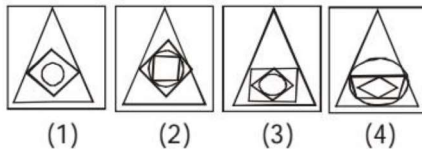
- | | |
|----------------|----------------|
| A. 13cm | B. 12cm |
| C. 10cm | D. 15cm |

Q 37. find the missing figure the series from the given answer figures.

Question Figures :



Answer Figures :

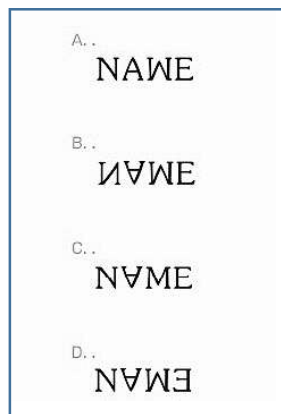


- | | |
|-------------|-------------|
| A. 1 | B. 2 |
| C. 3 | D. 4 |

*Because you are the
Best of the Best!*

Q 38. What will be the water image of the given figure?

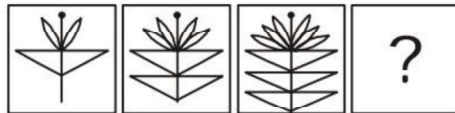
NAME



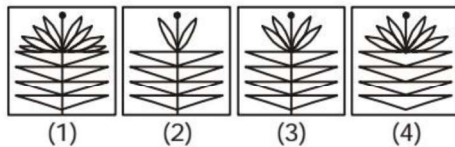
- A. A
- B. B
- C. C
- D. D

Q 39. Choose the correct alternative from the given ones that will complete the series.

Question Figures :



Answer Figures :

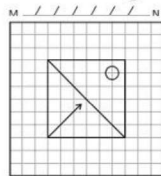


- A. 1
- B. 2
- C. 3
- D. 4

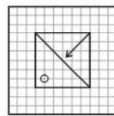
*Because you are the
Best of the Best!*

Q 40. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

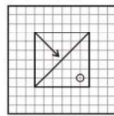
Question Figure :



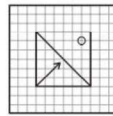
Answer Figures :



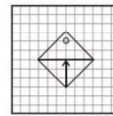
(1)



(2)



(3)



(4)

- A.** 1 **B.** 2
C. 3 **D.** 4

SAMPLE PAPER - 3
CLASS 6

NOF MATH
CHAMPIONS LEAGUE

*Because you are the
Best of the Best!*

ANSWER KEY

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| B | C | B | C | A | B | B | A | A | A |
| 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. |
| C | B | A | C | B | B | C | C | B | C |
| 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. |
| C | C | A | D | A | B | A | B | A | A |
| 31. | 32. | 33. | 34. | 35. | 36. | 37. | 38. | 39. | 40. |
| B | A | A | C | C | A | B | B | A | B |



*Because you are the
Best of the Best!*

Q 1. The sum of two odd numbers and one even number is always:

- | | |
|-----------------|---------------------|
| A. Odd | B. Even |
| C. Prime | D. Composite |

Q 2. A school has 120 students. They are to be divided into groups, such that each group has an equal number of students. How many ways can this be done?

- | | |
|--------------|--------------|
| A. 6 | B. 8 |
| C. 12 | D. 16 |

Q 3. What is $XLVIII + XXIX - XV$ in Roman numerals?

- | | |
|------------------|-----------------|
| A. LXII | B. LXXIV |
| C. LXXVII | D. XLII |

Q 4. A number has exactly 8 factors. Which of the following could be the number?

- | | |
|--------------|--------------|
| A. 24 | B. 30 |
| C. 36 | D. 60 |

Q 5. A baker divides 215 cookies equally among 7 boxes. How many cookies are left over?

- | | |
|-------------|-------------|
| A. 5 | B. 2 |
| C. 3 | D. 4 |

*Because you are the
Best of the Best!*

Q 6. Which fraction is equivalent to 0.375?

- | | |
|--------------------|-------------------|
| A. $\frac{3}{8}$ | B. $\frac{7}{16}$ |
| C. $\frac{15}{32}$ | D. $\frac{5}{16}$ |

Q 7. Simplify: $\frac{5}{6} - \frac{3}{4}$

- | | |
|-------------------|------------------|
| A. $\frac{1}{12}$ | B. $\frac{1}{4}$ |
| C. $\frac{7}{12}$ | D. $\frac{1}{3}$ |

Q 8. A bakery uses 3.25kg of flour for a batch of 15 loaves of bread. How much flour is required for 45 loaves?

- | | |
|-----------|------------|
| A. 7.75kg | B. 8.25kg |
| C. 9.75kg | D. 10.25kg |

Q 9. A farmer has a rectangular field of length 120m and width 7.5m. He wants to divide the field into square plots such that each plot has an area of 25m^2 . How many plots will the farmer get?

- | | |
|-------|-------|
| A. 32 | B. 36 |
| C. 48 | D. 64 |

Q 10. A, B, and C divide a sum of money in the ratio 5:3:2. If B gets ₹1,200, how much does A get?

- | | |
|-----------|-----------|
| A. ₹2,000 | B. ₹1,800 |
| C. ₹2,500 | D. ₹3,000 |

*Because you are the
Best of the Best!*

Q 11. Two numbers are in the ratio 7:9. If their HCF is 8, what are the numbers?

- | | |
|---------------------|---------------------|
| A. 28 and 36 | B. 56 and 72 |
| C. 21 and 27 | D. 14 and 18 |

Q 12. The ratio of red to blue marbles in a bag is 5:6. If there are 55 red marbles, how many blue marbles are there?

- | | |
|--------------|--------------|
| A. 60 | B. 66 |
| C. 72 | D. 75 |

Q 13. A mixture of acid and water is in the ratio 3:2. If there are 18 liters of acid, how much water is in the mixture?

- | | |
|---------------------|---------------------|
| A. 9 liters | B. 10 liters |
| C. 12 liters | D. 15 liters |

Q 14. The length, breadth, and height of a cuboid are 4 cm, 3 cm, and 2 cm, respectively. What is its surface area?

- | | |
|---------------------------|---------------------------|
| A. 24cm^2 | B. 52cm^2 |
| C. 48cm^2 | D. 64cm^2 |

Q 15. A rectangular field has a length of 80 m and a breadth of 60 m. What is the cost of fencing the field at ₹10 per meter?

- | | |
|------------------|------------------|
| A. ₹1,200 | B. ₹1,400 |
| C. ₹2,800 | D. ₹4,400 |

*Because you are the
Best of the Best!*

Q 16. The diameter of a sphere is 14 cm. What is its surface area?

- | | |
|----------------------------|----------------------------|
| A. 462cm^2 | B. 616cm^2 |
| C. 308cm^2 | D. 600cm^2 |

Q 17. On a wall of dimensions 10.5 m long and 8.5 m wide, a square shaped wall poster is stuck at the centre whose side measure is 2.5 m. If the remaining part of the wall is to be painted with pink colour costing Rs. 12 per sq. m, how much does it cost?

- | | |
|---------------------|-------------------|
| A. Rs. 89.25 | B. Rs. 996 |
| C. Rs. 830 | D. Rs. 12 |

Q 18. In a square shaped park, whose side measures 28 m, a rectangular pond is located at the centre with dimensions 3 m and 2 m. What is the area of the park excluding the pond?

- | | |
|---------------------|---------------------|
| A. 784 sq. m | B. 6 sq. m |
| C. 778 sq. m | D. 708 sq. m |

Q 19. The product of two consecutive integers is 56. Find the integers.

- | | |
|---------------|---------------|
| A. 7,8 | B. 8,9 |
| C. 4,5 | D. 2,3 |

Q 20. If $3x+2y=16$ and $x-y=2$, find x and y.

- | | |
|----------------------|----------------------|
| A. $x=4, y=2$ | B. $x=5, y=3$ |
| C. $x=6, y=4$ | D. $x=2, y=0$ |

*Because you are the
Best of the Best!*

Q 21. Write an equation for the statement: Four times a number decreased by 7 equals 21.

- | | |
|----------------------|----------------------|
| A. $4x-7=21$ | B. $4x+7=21$ |
| C. $4x-7=-21$ | D. $4x+7=-21$ |

Q 22. Find the value of x if $x^2-9=0$.

- | | |
|------------------------|--------------|
| A. 3 | B. -3 |
| C. Both A and B | D. 0 |

Q 23. A teacher awarded +5 points for each correct answer and -2 points for each incorrect answer. A student answered 10 questions correctly and 6 questions incorrectly. What is the student's total score?

- | | |
|--------------|--------------|
| A. 32 | B. 38 |
| C. 44 | D. 48 |

Q 24. The temperature was -9°C at night and increased by 13°C during the day. What was the temperature during the day?

- | | |
|-------------------------------|--------------------------------|
| A. 4°C | B. 6°C |
| C. 5°C | D. -4°C |

Q 25. A diver descends 18m and then ascends 25m. What is his final position relative to the surface?

- | | |
|---------------|----------------|
| A. 7m | B. -7m |
| C. 43m | D. -43m |

*Because you are the
Best of the Best!*

Q 26. Solve: $(-24) \div (+6) + (-8) \div (-2) + (+3)$

- | | |
|--------------|--------------|
| A. 3 | B. 6 |
| C. -9 | D. -6 |

Q 27. The radius of a circle is 7cm. What is its circumference?

- | | |
|----------------|------------------|
| A. 22cm | B. 44cm |
| C. 14cm | D. 38.5cm |

Q 28. Find the area of a circle with a diameter of 14cm.

- | | |
|-----------------------------|----------------------------|
| A. 77cm^2 | B. 154cm^2 |
| C. 38.5cm^2 | D. 616cm^2 |

Q 29. A semicircle has a radius of 14cm. Find its perimeter.

- | | |
|----------------|----------------|
| A. 22cm | B. 36cm |
| C. 64cm | D. 72cm |

Q 30. How many lines of symmetry does a square have?

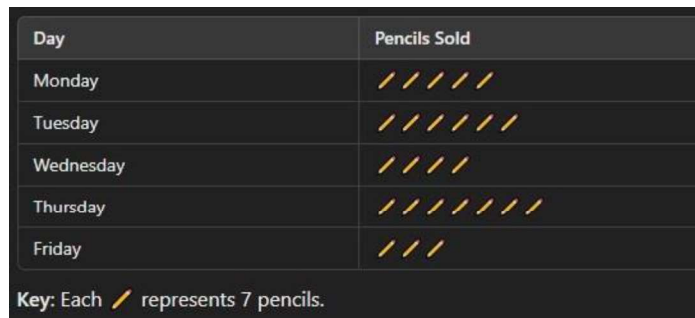
- | | |
|-------------|-------------|
| A. 2 | B. 4 |
| C. 8 | D. 1 |

Q 31. What is the measure of each interior angle of a regular hexagon?

- | | |
|----------------------|-----------------------|
| A. 60° | B. 120° |
| C. 90° | D. 180° |

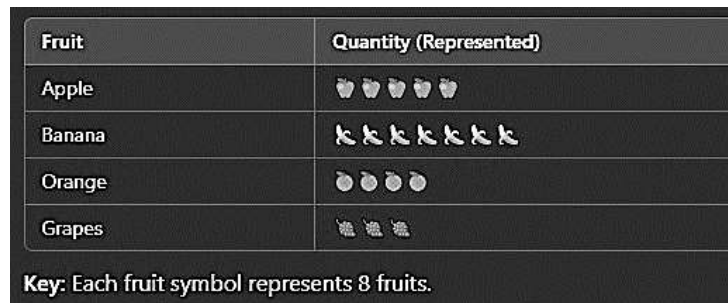
*Because you are the
Best of the Best!*

Q 32. The following pictograph shows the number of pencils sold by a stationery shop in a week:How many pencils were sold in total?



- A. 175 B. 189
C. 196 D. 212

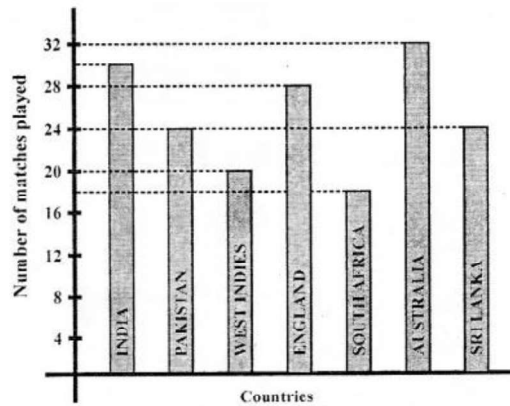
Q 33. A survey shows the number of different fruits consumed by students in a week:How many bananas were consumed?



- A. 40 B. 42
C. 56 D. 63

*Because you are the
Best of the Best!*

Q 34. Which country played a maximum number of matches?



- A. India
- B. England
- C. Pakistan
- D. Australia

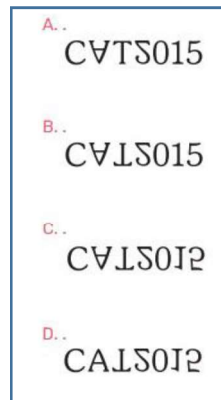
Q 35. The median of the numbers 4, 4, 7, 5, 7, 6, 1, 3, 11 is

- A. 7
- B. 5
- C. 6
- D. 4

*Because you are the
Best of the Best!*

Q 36. What will be the water image of the given figure?

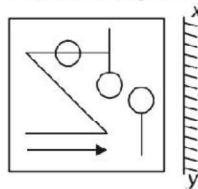
CAT2015



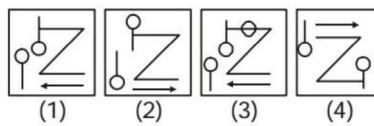
- A. A
- B. B
- C. C
- D. D

Q 37. What is the mirror image of the following figure? The mirror may be represented by a line XY.

Question Figure :



Answer Figures :

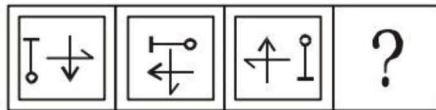


- A. 1
- B. 2
- C. 3
- D. 4

*Because you are the
Best of the Best!*

Q 38. find the missing figure the series from the given answer figures.

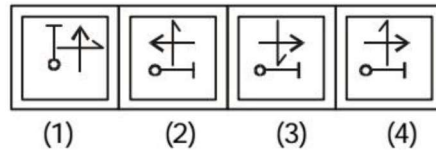
Question Figures :



A. 1

B. 2

Answer Figures :



C. 3

D. 4

Q 39. If CAT is written as XZG, how is DOG written?

A. WLT

B. XLT

C. MLO

D. WNI

Q 40. Choose the correct alternative from the given ones that will complete the series.

Question Figures :



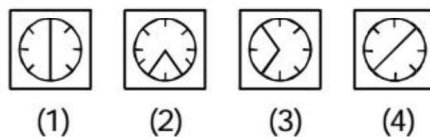
A. 1

B. 2

C. 3

D. 4

Answer Figures :



SAMPLE PAPER - 4
CLASS 6

NOF MATH
CHAMPIONS LEAGUE

*Because you are the
Best of the Best!*

ANSWER KEY

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| B | B | A | A | A | A | A | C | B | A |
| 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. |
| B | B | C | B | C | B | B | C | A | A |
| 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. |
| A | C | B | A | A | A | B | B | D | B |
| 31. | 32. | 33. | 34. | 35. | 36. | 37. | 38. | 39. | 40. |
| B | A | C | D | B | C | C | D | A | B |



BECAUSE YOU ARE THE BEST OF THE BEST

The registrations for the
new session (2025-26) ROUND 1
will begin from 1st April 2025.

All the students who will register in the month
of April will get a **welcome badge from NOF.**



WhatsApp Helpline: +91-9301195542, +91-9993733279

www.nofjunior.online · www.nof.org.in