Grade 5, IMO Level 1 Demo Test

Reasoning

1. Select the correct mirror image of the fig (X) if the mirror is placed along PQ.

Fig. X

(A)　(B)　(C)　(D)
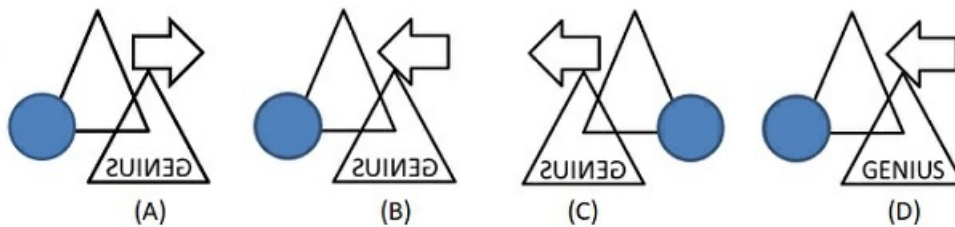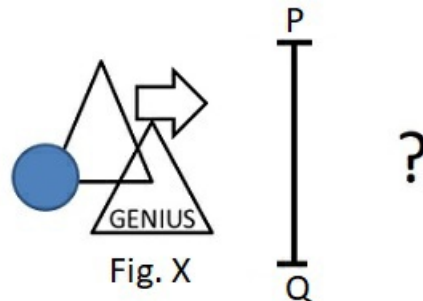
A. A　　　　**B**. B　　　　**C**. C　　　　**D**. D

2. Which of the following options can complete the pattern in Fig (X)?

Fig. X

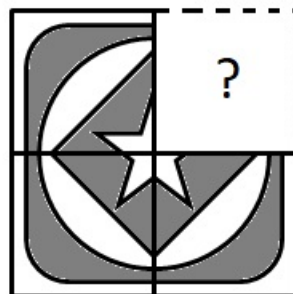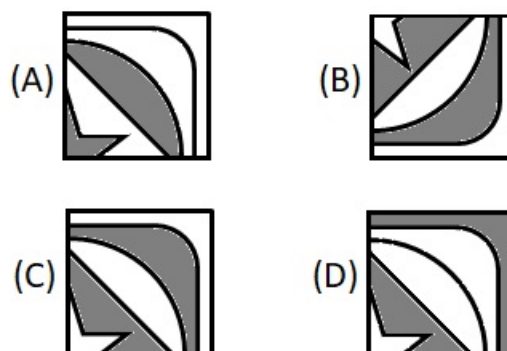(A)　(B)　(C)　(D)

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

**3.** In a certain code language, GENIUS is coded as FCKEPM. How will WINNER be coded in that language?

A. SPLLCS   **B**. SPLKCS   **C**. SPLLCO   **D**. SPMLCS

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4. If carpenter is called plumber, plumber is called baker, baker is called mason and mason is called carpenter, then who makes cakes for us?
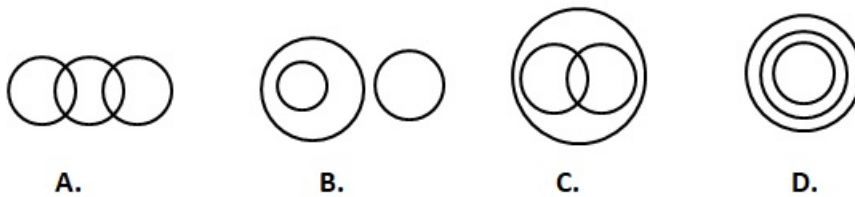
A. Baker   **B**. Mason   **C**. Plumber   **D**. Carpenter

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5. Ravi is facing post office. He turns 225° anticlockwise. What will he face after the turn?
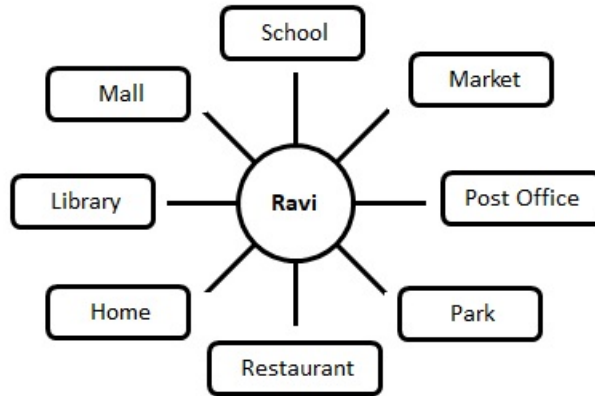
A. Park   **B**. Home   **C**. Mall   **D**. Restaurant

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6. Which of the following venn diagram represents the relationship amongst **Metal, Gold and Wood**?

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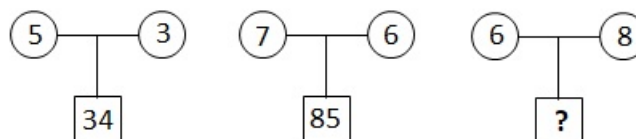
A. A   **B**. B   **C**. C   **D**. D

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7. Arrange the following in the descending order according to their values.
1) Century
2) Decade
3) Millennium
4) Triennium

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

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8. Find the missing number if same rule is followed for all the three figures.

A. 97   **B**. 82   **C**. 100   **D**. 107

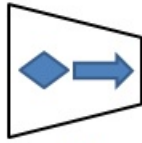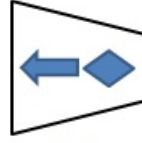**9.** Which of the following is the view of fig. (X) after 15/4 rotation clockwise?
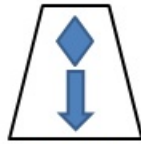
Fig. (X)
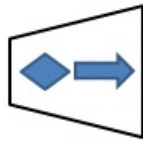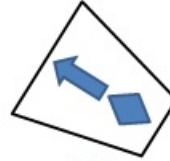
(A)   (B)   (C)   (D)

A. A   **B**. B   **C**. C   **D**. D
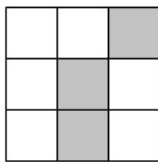
10. Which of the following is a symmetric figure?
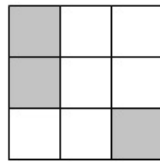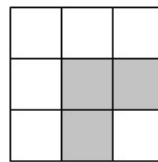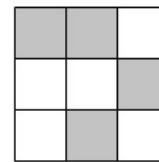
(A)   (B)   (C)   (D)

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

Maths

11. Riya's birth month has 30 days. She was born on 25th day of the month. There is a gap of 4 months between her birthday and christmas. Which is Riya's birth month?

A. April   **B**. June   **C**. September   **D**. November

12. Read the information carefully and answer the question.

1) There are 25 students in a class.
2) Each student likes atleast one sport.
3) 10 students like both cricket and football.
4) 11 students like only cricket.
5) 4 students like only football.

How many students like cricket?

A. 10   **B**. 11   **C**. 4   **D**. 21

13. There is a certain relationship between fig. P and fig. Q. Establish a similar relationship between fig. R and fig. S by selecting a suitable figure from the given options.

Fig. P   Fig. Q   Fig. R   Fig. S

(A)   (B)   (C)   (D)
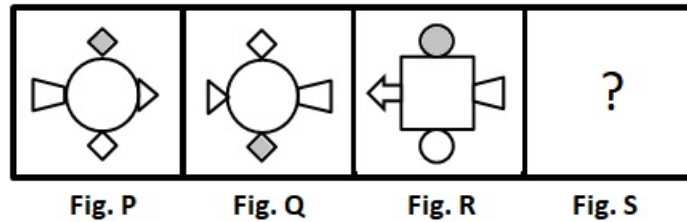
A. A   **B**. B   **C**. C   **D**. D

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14. In each of the following numbers if 2 is replaced by 7 and 9 is replaced by 5, then which will be second lowest number?

237, 523, 995, 775, 592

A. 592   **B**. 523   **C**. 237   **D**. 995

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15. Which of the following figure will continue the same problem series as shown below?

Problem Series

(A)   (B)   (C)   (D)
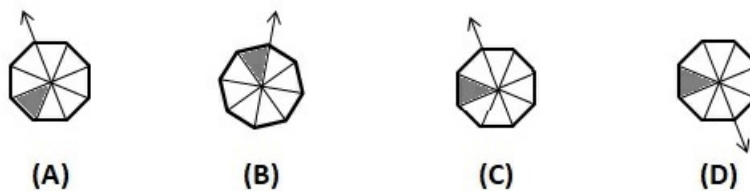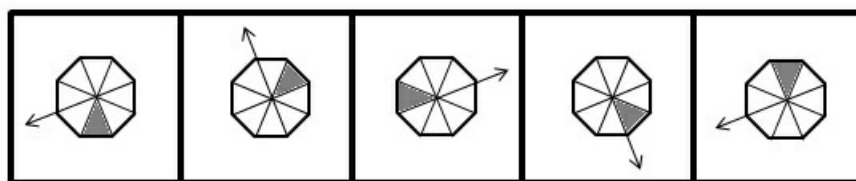
A. A   **B**. B   **C**. C   **D**. D
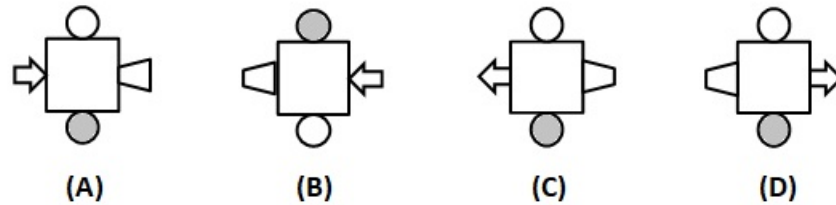
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16. A bottle had 3 1/4 litres of water.
Shanu drank 3/4 litres of water and Aarav drank 1 litres of water from the bottle.
How much water is left in the bottle ?

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

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17. The length of a rectangular field is twice its breadth.
If the perimeter of the field is 72 m than find the length of the field?

A. 12 m

B. 6 m

C. 24 m

D. 36 m

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18. In a chess board there are total 64 blocks (32 white and 32 black). If 8 white blocks are painted black than what fraction of total blocks will be white ?

A. 1/8

B. 3/8

C. 5/8

D. 7/8

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19. Asha can eat 3 bananas a day. How many days will it take her to eat 12 dozens of bananas ?

A. 48

B. 44

C. 40

D. 36

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20. Sum of the factors of 67 is _____

A. 67

B. 68

C. 70

D. 72

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21. A drum contains 21 litres of water. If 61/3 litres of water is used than how many litres will be left in the drum ?

A. 1/3

B. 2/3

C. 1

D. 4/3

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22. Aarav takes 2 hours to travel from Mumbai to Pune whereas Arnav takes 2.5 hours. If Aarav leaves Mumbai at 9:00 am and Arnav leaves 1 hour after Aarav, at what time will Arnav reach Pune ?

A. 12:30 am

B. 12:30 pm

C. 11:00 am

D. 11:00 pm

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23. In a park there are 20 children playing with each other. Also there are 5 adults with their dogs (1 dog with each adult). Additionally there are 3 stray dogs and 2 goats also present in the park. Total how many legs are there in the park ?

A. 90

B. 80

C. 70

D. 60

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24. Sum of the common factors of 31 and 41 is_____

A. 2

B. 1

C. 3

D. 4

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25. Karishma saves Rs 1 on weekdays (Monday to Friday) and Rs 2 on Saturdays and Sundays. How much money will she save in 4 weeks?

A. Rs 28

B. Rs 30

C. Rs 32

D. Rs 36

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26. The perimeter of a rectangular paper sheet is 6 times its width. If the width of the sheet is 1 m then find the length of the sheet?

A. 2

B. 3

C. 4

D. 5

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27. There are two bottles A and B. A is filled with 2 litres of milk and B is filled with 1 litres of milk. Rahul drank 7/4 litres from bottle A and 3/4 litres from bottle B. Which of the bottles contains more milk now ?

A. A   **B**. B   **C**. Both contain equal amount   **D**. Can't be determined

28. Find P if:
Q = 23.3 X 3
R = 32.1
Q = P + R

A. 37.8   **B**. 100   **C**. 102   **D**. 8.8

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29. In an exam Ram scored 75 marks in Mathematics and 65 marks in science. If there were total 3 subject and Ram's total score was 200 marks than how much Ram scored in the third subject ?

A. 50   **B**. 60   **C**. 70   **D**. 80

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30. Find a three digit number based on following information:
1. Sum of first and third digit is 11
2. First digit is largest single digit number
3. Middle digit is equal to difference between first and third digit

A. 615   **B**. 853   **C**. 972   **D**. 279

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31. In a school there are 20 boy and 30 girl student. Also there are 10 male and 5 female teachers.What fraction doeas females (including girl students) form of the total school strength ?

A. 9/13   **B**. 7/13   **C**. 5/13   **D**. 3/13

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32. The length of a square field is 4 metres. If the cost of levelling the field is Rs 100 per square metre, find the total cost required to level the field ?

A. Rs 400   **B**. Rs 160   **C**. Rs 1200   **D**. Rs 1600

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33. If the cost of a wire is Rs 2 per metre than how much money is required to make an equilateral triangle of side 10 metres using the wire ?

A. Rs 30   **B**. Rs 60   **C**. Rs 40   **D**. Rs 50

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34. Varun had Rs 1000. He bought a toy car for Rs 203.50 and a school bag for Rs 700. How much money is left with Varun after the purchase?

A. 98.50   **B**. 97.50   **C**. 95   **D**. 96.50

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35. Rahul's annual pocket money is Rs 3275 and he spends Rs 1135 per Year. Find Rahul's annual savings.

A. 2140   **B**. 2150   **C**. 2175   **D**. 2200

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36. If we divide 5 tens, 2 ones, 1 tenths and 3 hundredths by 13 the result will be same as_____

A. 64.16/16   **B**. 70.2/16   **C**. 80.9/20   **D**. 100.2/25

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37. Rahul had 200 pencils. He grouped them in packs of 4. Total how many packs can Rahul form using the pencils ?

A. 40   **B**. 50   **C**. 60   **D**. 70

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38. Which of the following fractions are equal to 1/3 in their simplest form:
A. 100/300
B. 19/76
C. 17/51
D. 21/62

A. A & B   **B**. A & C   **C**. B & C   **D**. B & D

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39. In five matches of cricket Saurav scored total 500 runs. He scored 150 and 100 runs in first and last match. His score in second and fourth match was 75 runs each. How much he scored in third match ?

A. 75   **B**. 100   **C**. 50   **D**. 90
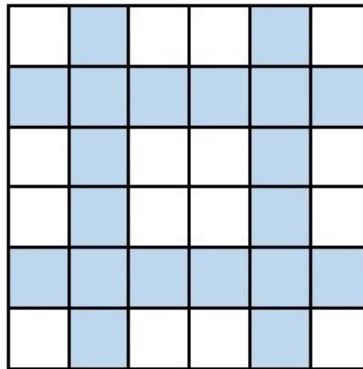
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40. Which of the following number is the largest?

A. 0.01   **B**. 0.101   **C**. 0.011   **D**. 0.11
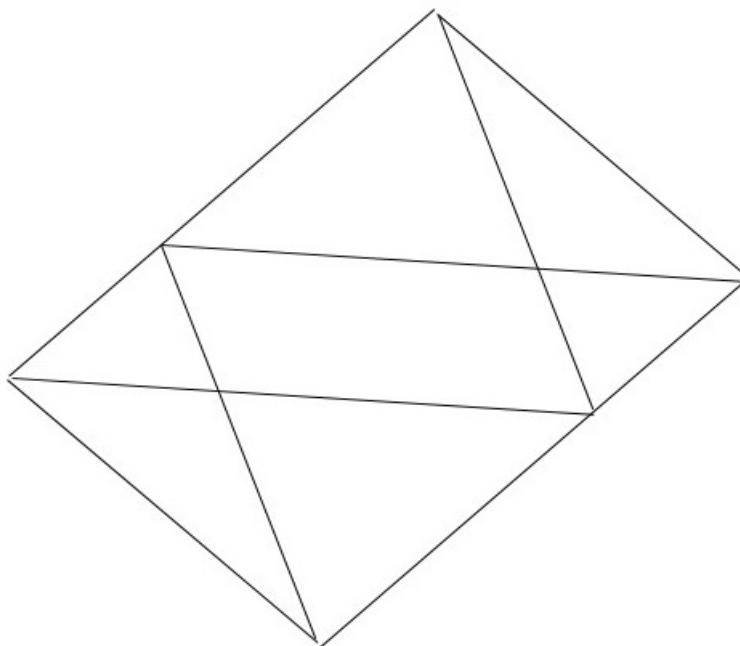
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41. What fraction of the figure is unshaded?

A. 2/9   **B**. 4/9   **C**. 7/9   **D**. 1

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42. How many pair of parallel lines are there in the given figure ?

A. 12   **B**. 8   **C**. 6   **D**. 4

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43. Find the area of the shaded region if all the triangles are equal.
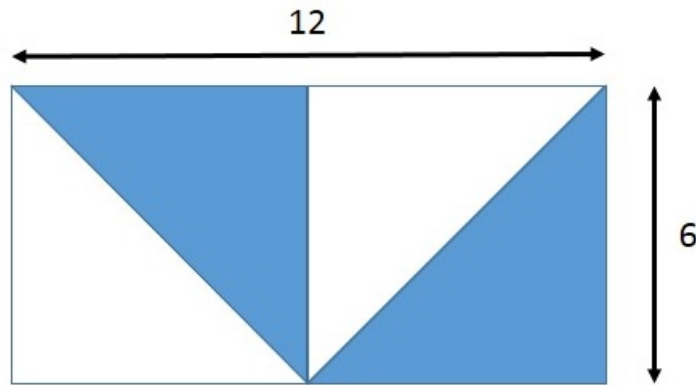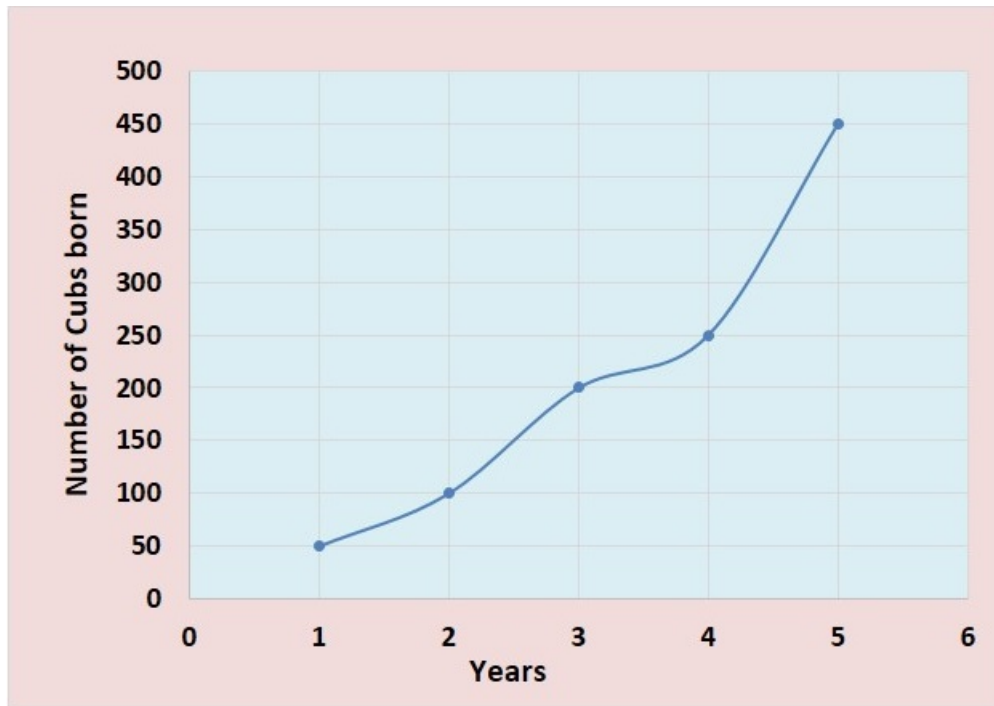

A. 18   **B**. 36   **C**. 54   **D**. 72

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44. The given graph show number of Lion cubs born in each year. Find the number of cubs born from Year 2 to Year 4.
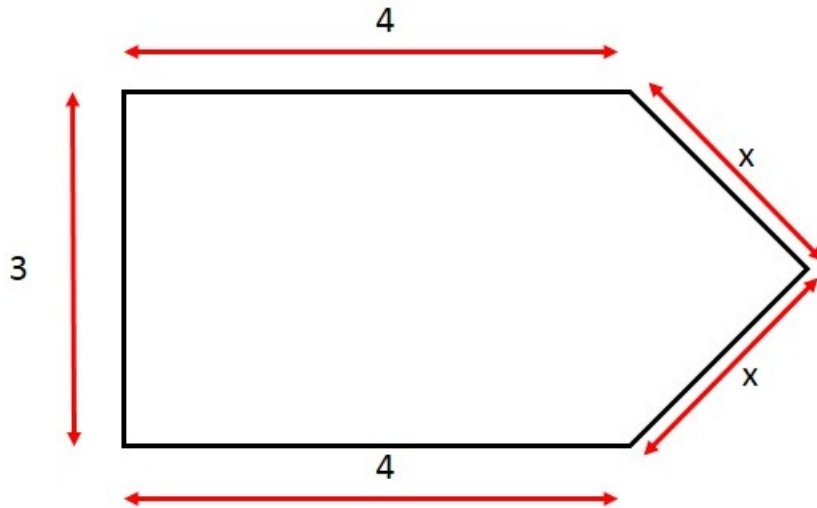

A. 500   **B**. 550   **C**. 600   **D**. 700

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45. If the perimeter of the following figure is 15 units than find the value of x.

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

Achievers Section

46. There is a drum of capacity 24 litres. Amit started filling the drum with water using a bottle of capacity 3/2 litres. How many times Amit needs to repeat the process so that the drum gets filled ?

A. 4   **B**. 8   **C**. 12   **D**. 16

47. Find the 4 digit number based on following information:
1. Sum of first and fourth digit = 10
2. Second and third digit are equal
3. First digit is 2 more than 3
4. Sum of all four digits = 18

A. 5445   **B**. 5545   **C**. 5454   **D**. 5555

48. Aarav cycles 5 Km per day. How many Kilometres of cycling Aarav completed in the year 2016 ?

A. 1810   **B**. 1825   **C**. 1830   **D**. 1840

49. The given graph show number of Lion cubs born in each year. If the initial population of lions was 200, find the total lion population at the end of Year 5.
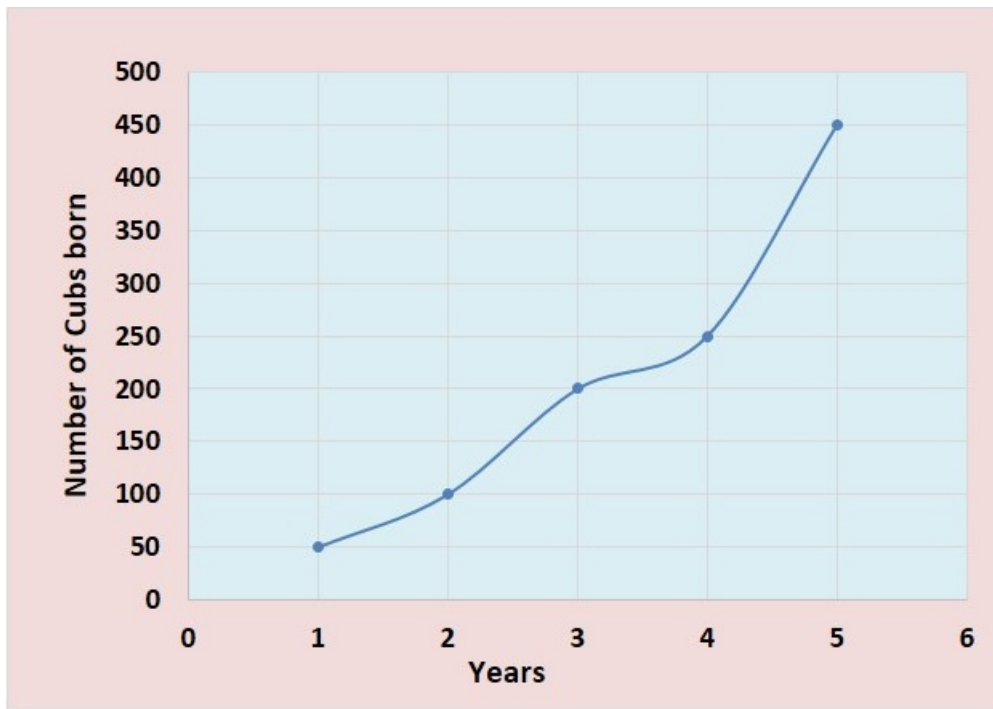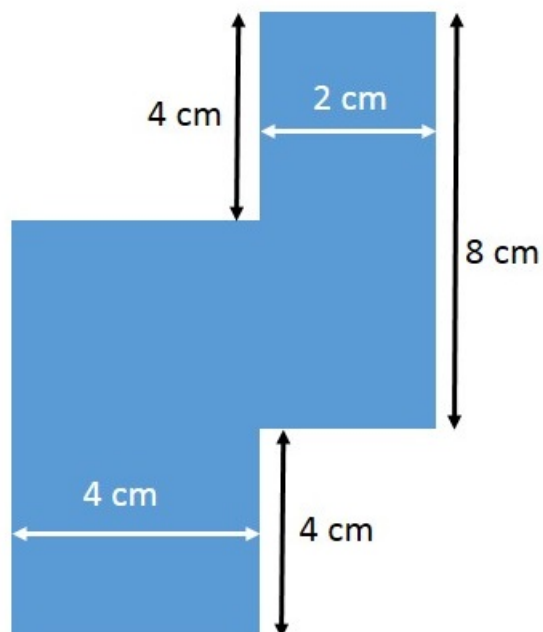
A. 1000   **B**. 1100   **C**. 1250   **D**. 1350

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50. Find the area of the given figure?

A. 24   **B**. 36   **C**. 48   **D**. 52