Keys: Grade 5, IMO Level 1 Demo Test

Grade : 5
Time : 1 Hr
Answer Sheet

1. C - C

---

2. C - C

---

3. A - SPLLCS

---

4. B - Mason

---

5. B - Home

---

6. B - B

---

7. D - 3, 1, 2, 4

Units of time:
1) Year
2) Biennium = 2 years
3) Triennium = 3 years
4) Quadrennium = 4 years
5) Decade = 10 years
6) Century = 100 years
7) Millennium = 1000 years

---

8. C - 100

rule is 5X5 + 3X3 = 34, 7X7 + 6X6 = 85
so, 6X6 + 8X8 = 100

---

9. A - A

---

10. C - C

---

11. A - April

Copyright @2025 Olympiad Genius. All rights reserved.

12. D - 21

10 students like cricket and football and 11 likes only cricket so there are 10 + 11 = 21 students who like cricket.

---

13. D - D

---

14. A - 592

After conversion,
237 = 737,
523 = 573,
995 = 555,
775 = 775,
592 = 557

Of these 555 is lowest and 557 is second lowest, so 592 (557) is the answer.

---

15. A - A

The arrow is moving clockwise by 2 triangular blocks and the shaded triangle is moving anti-clockwise by 2 triangular blocks in each subsequent picture.

---

16. B - 1 1/2

Bottle had - 3 1/4 = 13/4 litres
Shanu drank = 3/4 litres and Aarav drank = 1 litres
Total water drank = 3/4 + 1 = 7/4 litres
Water left in the bottle = 13/4 - 7/4 = 6/4 = 1 1/2 litres

---

17. C - 24 m

Lets assume breadth of the field = x
So length = 2x
Perimeter = x + x + 2x + 2x = 72 m
6x = 72 m
x = 12 m
Length = 2x = 2 X 12 = 24 m

---

18. B - 3/8

Total blocks - 64 = 32 white + 32 black
If 8 white blocks are painted black than
white blocks = 32 - 8 = 24
black blocks = 32 + 8 = 40
fraction of white blocks = 24/64 = 3/8

---

19. A - 48

12 dozens = 12 X 12 = 144 bananas
She eats 3 bananas in 1 day so for eating 144 bananas days required = 144/3 = 48 days

---

Copyright @2025 Olympiad Genius. All rights reserved.

20. B - 68

67 is a prime number. The factors of 67 are 1 and 67
So the sum is 67 + 1 = 68

---

21. B - 2/3

Remaining water = 21 - 61/3 = (63-61)/3 = 2/3 litres

---

22. B - 12:30 pm

Arnav Leaves after 1 hour of Aarav means Arnav leavs at 10:00 am.
Sinci Arnav takes 2.5 hours to travel from Mumbai to Pune, he will reach Pune at 12:30 pm.

---

23. A - 90

20 childrens = 40 legs
5 adults = 10 legs
5 dogs (1 each wth 1 adult) = 20 legs
3 stray dogs = 12 legs
2 goats = 8 legs
Total = 40 + 10 +20 + 12 + 8 = 90 legs

---

24. B - 1

Both 31 and 41 are prime numbers
Factors of 31 = 1 and 31
Factors of 41 = 1 and 41
Common factor = 1

---

25. D - Rs 36

4 weeks = 20 weekdays (each week have 5 weekdays, Monday to Friday), 4 saturdays and 4 sundays
Total saving during weekdays = 20 X 1 = Rs 20
Total saving on saturdays and sundays = 8 X 2 = Rs 16
Total saving in 4 weeks = 20 + 16 = Rs 36

---

26. A - 2

Given that width = 1 m
Assume that length = x
Perimeter = 6 times of width = 6 m
Also perimeter = x + x + 1 + 1 = 6
2x = 4 m
x = 2 m

---

27. C - Both contain equal amount

A had 2 litres and B had 1 litres of milk
After Rahul drank milk:
Remaining milk in A = 2 - 7/4 = (8-7)/4 = 1/4 litres
Remaining milk in B = 1 - 3/4 = (4-3)/4 = 1/4 litres
So both bottles contain equal milk now

Copyright @2025 Olympiad Genius. All rights reserved.

28. A - 37.8

Q = P + R =23.3 X 3 = P + 32.1
P = 69.9 -32.1 = 37.8

---

29. B - 60

Lets assume Ram scored P marks in third subject
so P + 75 + 65 = 200
P = 200 - 140 = 60

---

30. C - 972

First difit = largest single digit number = 9
Third digit + 9 = 11 so Third digit = 2
Middile digit = 9 - 2 = 7
So the number is 972

---

31. B - 7/13

Total population = 20 + 30 + 10 + 5 = 65
Femal population = 30 + 5 = 35
Fraction = 35/65 = 7/13

---

32. D - Rs 1600

Area of field = 4 X 4 = 16 metre square
Total cost = 16 X 100 = Rs 1600

---

33. B - Rs 60

Perimeter of the triangle = 3 X 10 = 30 metres
Cost = Rs 2 X 30 = Rs 60

---

34. D - 96.50

Money spent by Varun = 203.5 + 700 = 903.5
Money left = Rs 1000 - Rs 903.50 = Rs 96.50

---

35. A - 2140

Savings = 3275 - 1135 = Rs 2140

---

36. A - 64.16/16

5 tens, 2 ones, 1 tenths and 3 hundredths = 52.13
52.13/13 = 4.01

---

37. B - 50

Total pencils = 200
Packs of 4 pencils = 200/4 = 50

Copyright @2025 Olympiad Genius. All rights reserved.

38. B - A & C

A. 100/300 = 1/3
B. 19/76 = 1/4
C. 17/51 = 1/3
D. 21/62 = 21/62

---

39. B - 100

Lets assume he score P runs in third match so
150 + 75 + P + 75 + 100 = 500
P + 400 = 500
P = 100 runs

---

40. D - 0.11

---

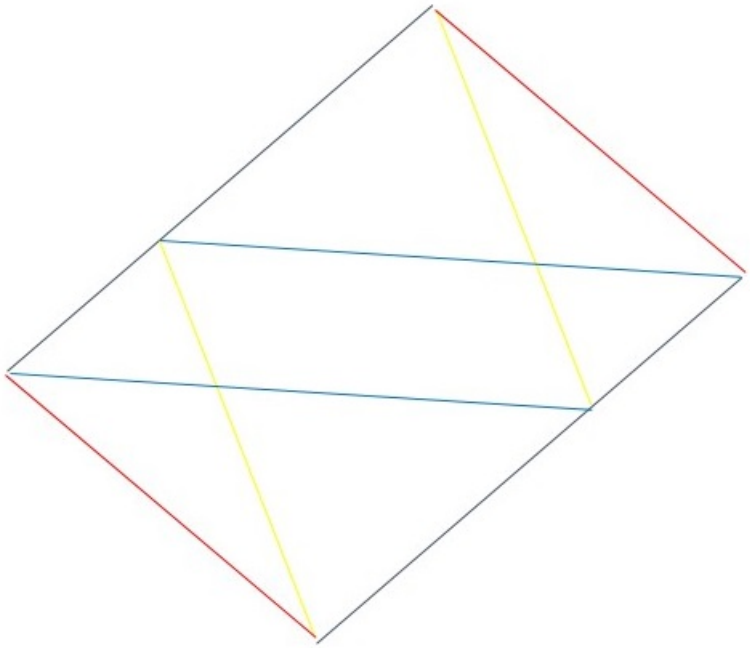
41. B - 4/9

Total small squares = 36
Shaded (blue coloured) squares = 20
Unshaded (white coloured) squares = 36 - 20 = 16
Ratio = 16/36 = 4/9

---

42. D - 4

Refer Solution Figure (Parralel lines shown in same colour)



---

43. B - 36

Total Area = 12 X 6 = 72
4 triangles = 72
shaded area = 2 triangles = 36

Copyright @2025 Olympiad Genius. All rights reserved.

44. B - 550

Cubs born in Year 2 = 100
Cubs born in Year 3 = 200
Cubs born in Year 4 = 250
Totalcubs born from Year 2 to Year 4 = 550

---

45. D - 2

Perimeter = 4 + 4 + 3 + x + x = 15
2x = 15 - 11
2x = 4
x = 2

---

46. D - 16

Drum Capacity = 24
Lets assume that it requires n times to fill the drum
so n X 3/2 = 24
n = 24 X 2/3 = 16

---

47. A - 5445

First digit = 2 + 3 = 5
First digit + 4th digit = 10 so fourth digit = 10 - 5 = 5
First + second + third + fourth = 18
5 + second + third + 5 = 18
second + third = 8
second = third = 4
so number = 5445

---

48. C - 1830

2016 was a leap year with 366 days
So total Km = 5 X 366 = 1830 Km

---

49. C - 1250

Cubs born in Year 2 = 50
Cubs born in Year 2 = 100
Cubs born in Year 3 = 200
Cubs born in Year 4 = 250
Cubs born in Year 5 = 450
Total cubs born = 50 + 100 + 200 + 250 + 450 = 1050
Total Lion population = 200 + 1050 = 1250

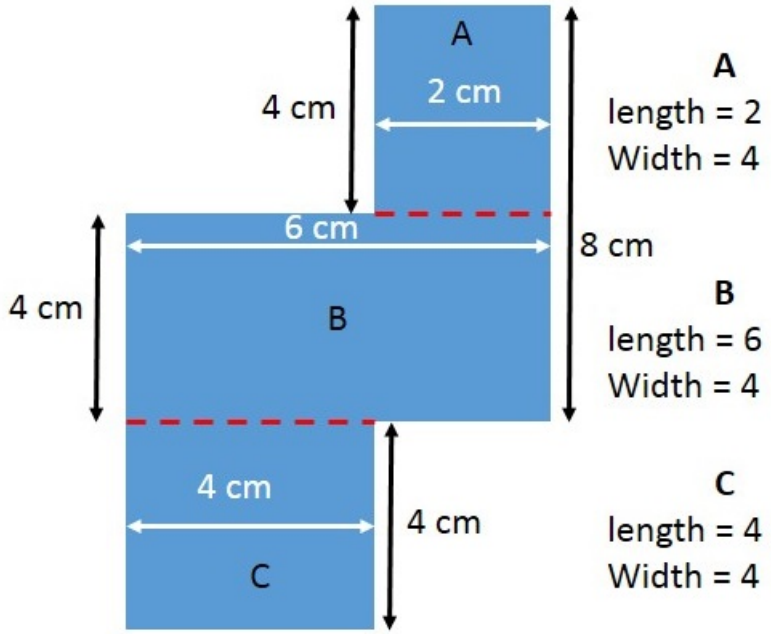
---

50. C - 48

Refer solution figure:
The figure can be divided into three rectangles A, B and C
From figure:
Area of A = 2 X 4 = 8 cm2
Area of B = 6 X 4 = 24 cm2
Area of C = 4 X 4 = 16 cm2
Total Area = 8 + 24 + 16 = 48 cm ^{2}

Copyright @2025 Olympiad Genius. All rights reserved.

50. C - 48



Copyright @2025 Olympiad Genius. All rights reserved.