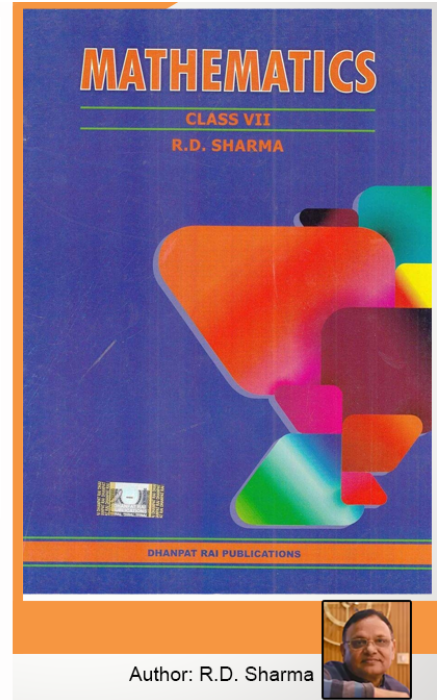


Class 7 - Chapter 19 Visualising Solid Shapes



RD Sharma Solutions for Class 7 Maths Chapter 19–Visualising Solid Shapes

Class 7: Maths Chapter 19 solutions. Complete Class 7 Maths Chapter 19 Notes.

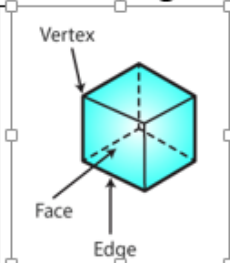

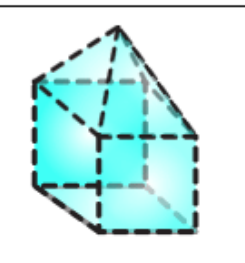
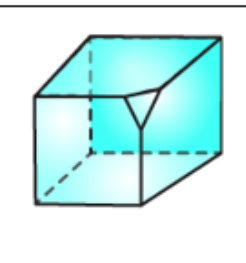
RD Sharma Solutions for Class 7 Maths Chapter 19–Visualising Solid Shapes

RD Sharma 7th Maths Chapter 19, Class 7 Maths Chapter 19 solutions

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1. Complete the following table and verify Euler's formula in each case.

				
Faces (F)	6	4		
Edges (E)	12			
Vertex (V)	8	4		

Solution:

(i) We know that Euler's formula is $(F - E + V)$

$$(F - E + V) = (6 - 12 + 8) = 2$$

Hence Euler's formula verified

(ii) We know that Euler's formula is $(F - E + V)$

$$(F - E + V) = (4 - E + 4) = 2.$$

$$E = 6$$

Hence Euler's formula verified

(iii) We know that Euler's formula is $(F - E + V)$

From the figure,

$$(F - E + V) = (9 - 16 + 9) = 2.$$

Hence Euler's formula verified

(iv) We know that Euler's formula is $(F - E + V)$

From the figure,

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$$(F - E + V) = (7 - 15 + 10) = 2.$$

Hence Euler's formula verified

2. Give three examples from our daily life which are in the form of

(i) A cone

(ii) A sphere

(iii) A cuboid

(iv) A cylinder

(v) A pyramid.

Solution:

(i) Examples for Cone: Ice-cream cone, birthday cap

(ii) Examples of Sphere: Football, a round apple, an orange

(iii) Examples of Cuboid: dice, duster, book, rectangular box

(iv) Examples of Cylinder: circular pipe, glass, circular pole, gas cylinder

(v) Examples for Pyramid: Christmas tree, prism

Exercise 19.2 Page No: 19.5

1. Match the following nets with appropriate solids:

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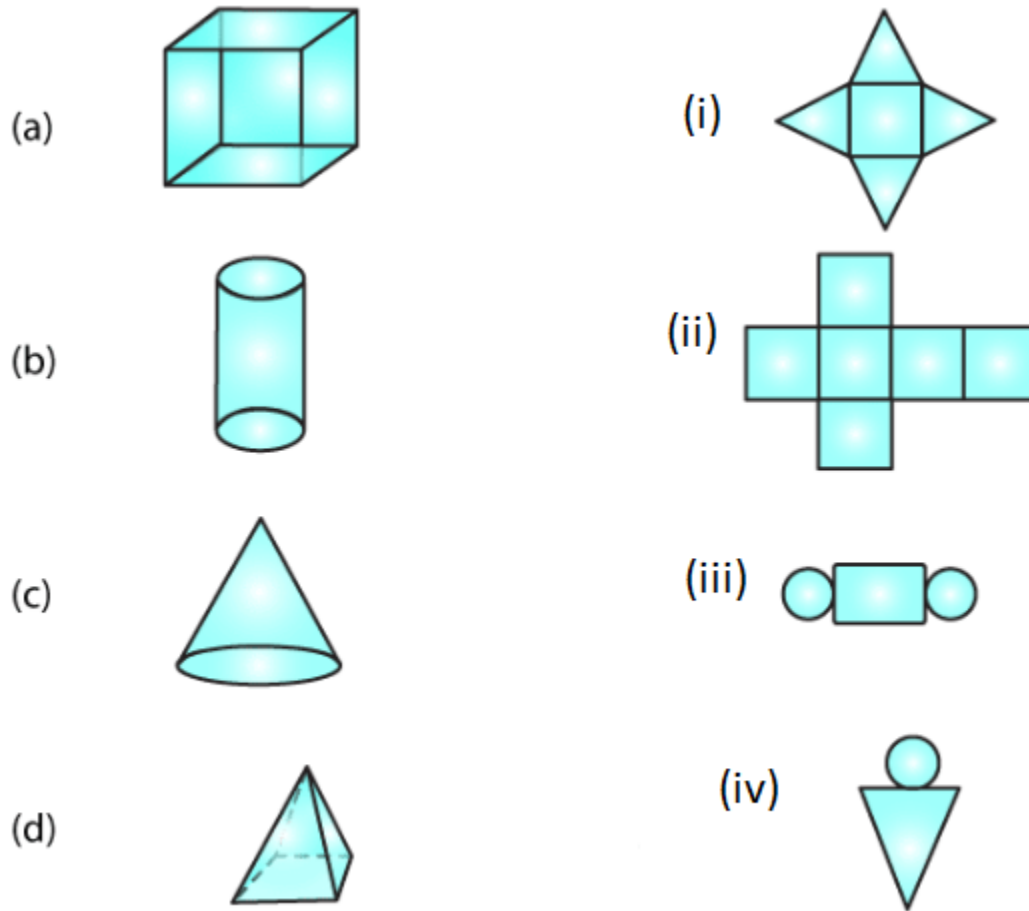


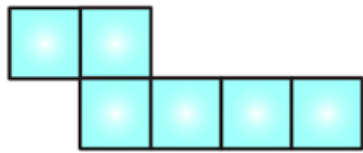
Fig. 20

Solution:

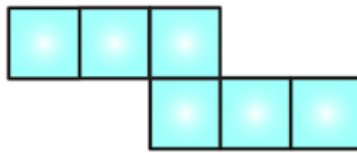
- (a) → (ii)
- (b) → (iii)
- (c) → (iv)
- (d) → (i)

2. Identify the nets which can be used to make cubes (cut-out the nets and try it):

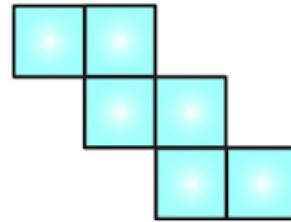
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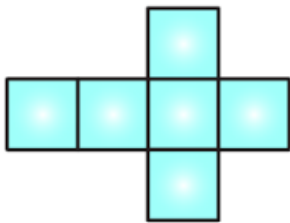
(i)



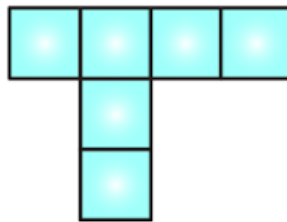
(ii)



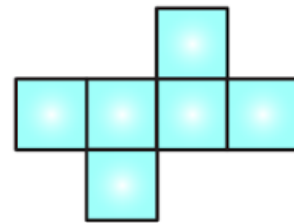
(iii)



(iv)



(v)



(vi)

Fig. 21

Solution:

Only (ii), (iv) and (vi) form a cube.

3. Can the following be a net for a die? Explain your answer.

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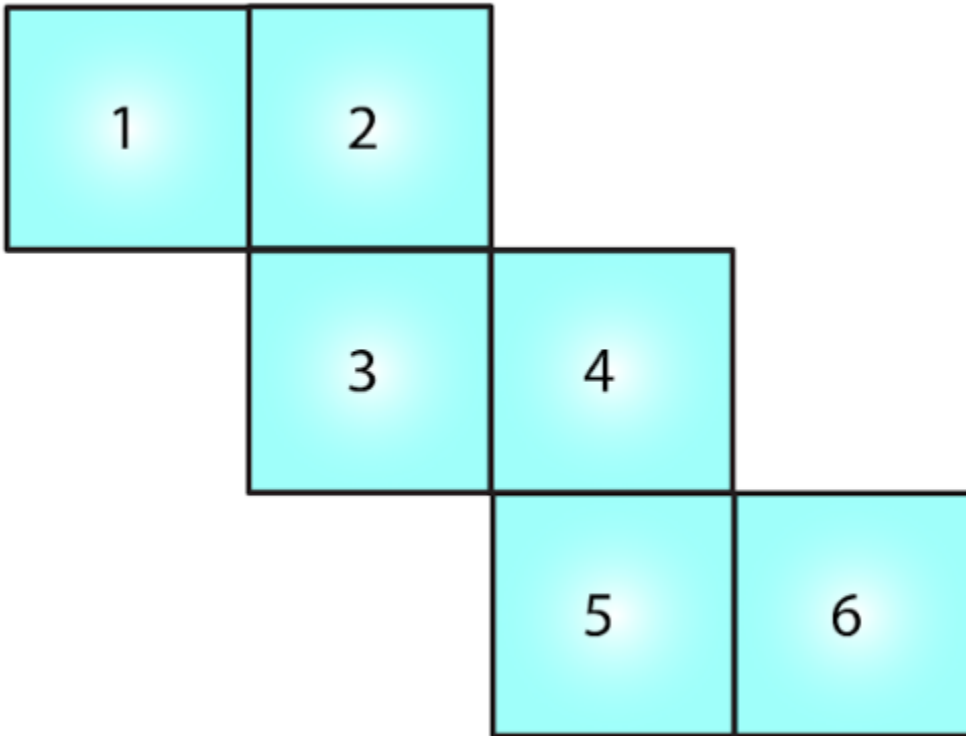


Fig. 22

Solution:

We know that in a die, the sum of the number of opposite faces of a die is 7. In the given figure, it is not possible to get the sum as 7. Hence the given net is not suitable for a die.

4. Out of the following four nets there are two correct nets to make a tetrahedron. Identify them.

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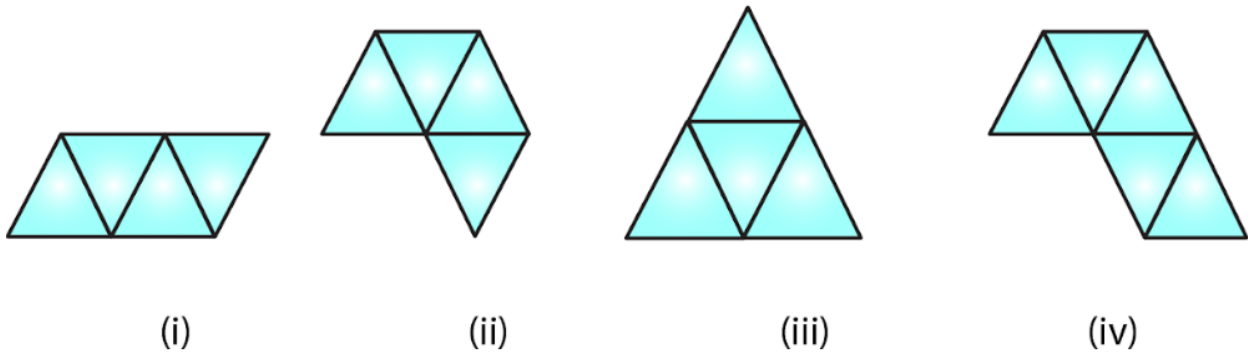
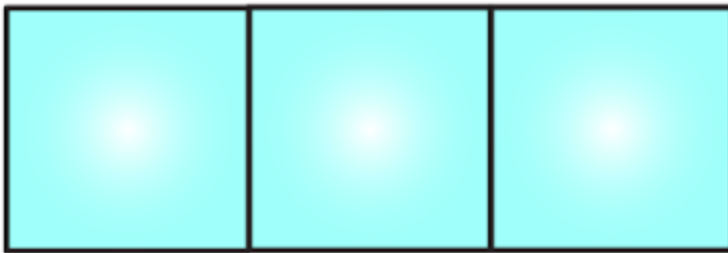


Fig. 23

Solution:

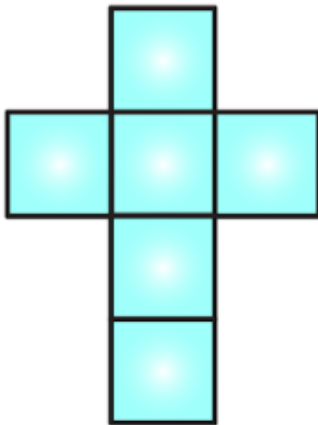
For making a tetrahedron, only (i) and (iii) are suitable nets.

5. Here is an incomplete net for making a cube. Complete it in at least two different ways.

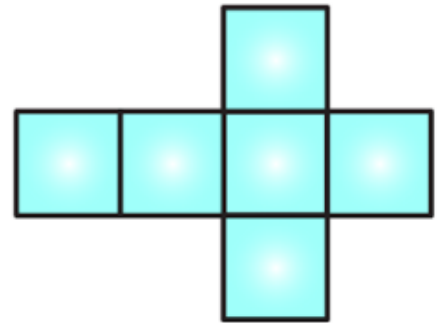


Solution:

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(i)



(ii)



Chapterwise RD Sharma Solutions for Class 7 Maths :

- Chapter 1–Integers
- Chapter 2–Fractions
- Chapter 3–Decimals
- Chapter 4–Rational Numbers
- Chapter 5–Operations On Rational Numbers
- Chapter 6–Exponents
- Chapter 7–Algebraic Expressions
- Chapter 8–Linear Equations in One Variable
- Chapter 9–Ratio And Proportion
- Chapter 10–Unitary Method
- Chapter 11–Percentage
- Chapter 12–Profit And Loss
- Chapter 13–Simple Interest
- Chapter 14–Lines And Angles
- Chapter 15–Properties of Triangles
- Chapter 16–Congruence
- Chapter 17–Constructions
- Chapter 18–Symmetry
- Chapter 19–Visualising Solid Shapes
- Chapter 20–Mensuration - I (Perimeter and area of rectilinear figures)
- Chapter 21–Mensuration - II (Area of Circle)
- Chapter 22–Data Handling - I (Collection and Organisation of Data)
- Chapter 23–Data Handling - II Central Values
- Chapter 24–Data Handling - III (Constructions of Bar Graphs)
- Chapter 25–Data Handling - IV (Probability)

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About RD Sharma

RD Sharma isn't the kind of author you'd bump into at lit fests. But his bestselling books have helped many CBSE students lose their dread of maths. Sunday Times profiles the tutor turned internet star

He dreams of algorithms that would give most people nightmares. And, spends every waking hour thinking of ways to explain concepts like 'series solution of linear differential equations'. Meet Dr Ravi Dutt Sharma — mathematics teacher and author of 25 reference books — whose name evokes as much awe as the subject he teaches. And though students have used his thick tomes for the last 31 years to ace the dreaded maths exam, it's only recently that a spoof video turned the tutor into a YouTube star.

R D Sharma had a good laugh but said he shared little with his on-screen persona except for the love for maths. "I like to spend all my time thinking and writing about maths problems. I find it relaxing," he says. When he is not writing books explaining mathematical concepts for classes 6 to 12 and engineering students, Sharma is busy dispensing his duty as vice-principal and head of department of science and humanities at Delhi government's Guru Nanak Dev Institute of Technology.

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