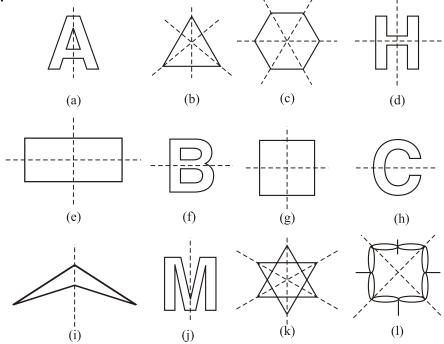
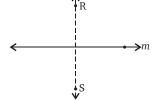


Exercise 14.1

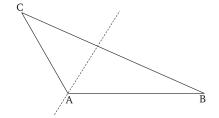
- 1. (a), (d), (e), (f), (g), (h) and (i) are lines of symmetry.
- 2.



- 3. ---• Q
- 4.

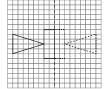


5.

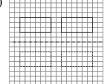


Exercise 14.2

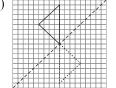
1. (a)



(b)



(c)

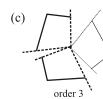


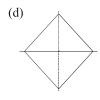
- 2. (a) (i) rotations (ii) reflections
 - (b) (i) reflections (ii) rotations (iii) reflections
 - (c) (i) reflections (ii) rotations (iii) rotations
 - (d) (i) rotations (ii) reflections (iii) rotations
- **3.** Z, X, S, O and H are rotational symmetry letters.
- **4.** (a), (b), (c), (e), (f) and (g) are rotational symmetry.
- **5.** (a) 5 (b) 2 (c) 3 (d) 3 (e) 6 (f) 4

6. (a



(b) order 3

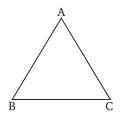


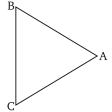


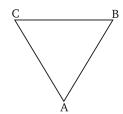
order 4

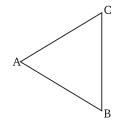
- 7. (a) (i), (ii), (iii) and (iv) are rotational symmetry.
 - (b) (ii), (iii), (iv) and (v) are point symmetry.

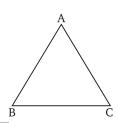
8.











Exercise 14.3

- 1. H,O and X are both line symmetry and rotational symmetry.
- 2. b, c, d, and g are both line symmetry and rotational symmetry.
- **3.** (i) (a) 3 (b) 3

(ii) (a) 2 (b) 3

(iii) (a) 0 (b) 2

(iv) (a) 2 (b) 2

(v) (a) 4 (b) 4

- (vi) (a) 2 (b) 2
- 4. (a) (i) Rotational (ii) Rotational (iii) Reflection
 - (b) (i) Reflection (ii) Rotational (iii) Rotational
 - (c) (i) Reflection (ii) Rotational (iii) Reflection
- **5.** (i) (a) 2 line symmetry (b) 4 order of rotational symmetry.
 - (ii) (a) 0 line symmetry (b) 4 order of rotational symmetry.
 - (iii) (a) 2 line symmetry (b) 3 order of rotational symmetry.
 - (iv) (a) 3 line symmetry (b) 3 order of rotational symmetry.

MCQs

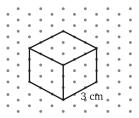
- **1.** (d) **2.** (d) **3.**
 - **3.** (b)
- **4.** (c)
- **5.** (d)

15 - Identification of three Dimensional Shapes

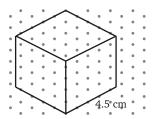


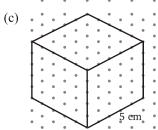
Exercise 15.1

- 1. Plane figure → Rhombus, Hexagon, Trapezium, Circle, Otagon. Solid figure → Cylinder, Sphere, Square prism pyramid.
- **2.** (a) Cuboid \rightarrow match-box, geometry box, book.
 - (b) Cube \rightarrow sugar cub, dice, ice-cube.
 - (c) Cylinder \rightarrow tube light, tin container, water pipes.
 - (d) Cone \rightarrow ice-cream cone, joker's cap, X mas tree.
 - (e) Triangular Prism \rightarrow ridge tent, light prism, chocolate bar.
 - (f) Sphere \rightarrow football, marbles, watermelon.
- 3. (a) Cuboid (b) Cylinder(c) Cone (d) Cuboid (e) Cube (f) Cylinder
- 4. Pantagonal pyramid.
- **5.** (a) 3 cm

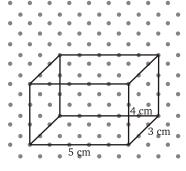




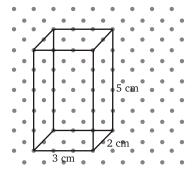




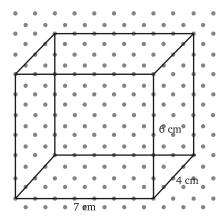
6. (a) $5 \text{ cm} \times 3 \text{ cm} \times 4 \text{ cm}$



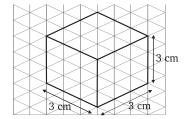
(b) $3 \text{ cm} \times 2 \text{ cm} \times 5 \text{ cm}$

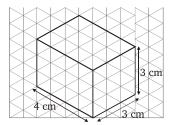


(c) $7 \text{ cm} \times 4 \text{ cm} \times 6 \text{ cm}$

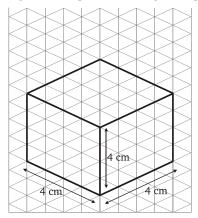


- 7. There are two cubes in the given figure.
- 8. (a) $3 \text{ cm} \times 3 \text{ cm} \times 3 \text{ cm}$
- (b) $4 \times 3 \times 3$

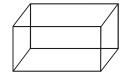




- (c) No, because every length of an equilateral triangle is equal to 1 cm.
- 9. No, because every length of an equilateral triangle is equal to 1 cm.

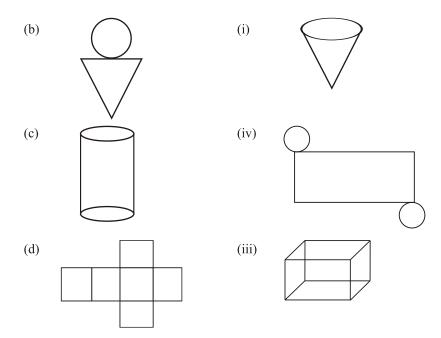


- 10. Seven cubes are needed to make the stack.
 - **1.** (a)

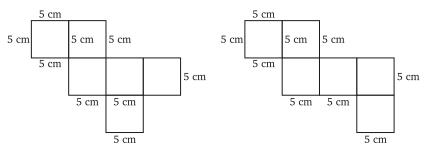


- Exercise 15.2
 - (ii)





- 2. (c) is correct option of a cube.
- 3. (b) is correct option of a cylinder.
- **4.** (a) P,Q,R,S are the vertices of the tetrahedron.
 - (b) PS, PQ, QR and RS are the edges of the tetrahedron.
 - (c) POS, POR, OSR and PSR are the vertices of the tetrahedron.
- 5. (a) Hexagonal pyramid (b) Octahedron (c) Square pyramid
- 6. The net of this figure is cuboid.
- 7. Two different ways of a cube.



There are 6 face in the net.

- **8.** (a) HG edge will meet JK.
 - (b) DE edge will meet LM.

MCQs

- **1.** (b) **2.** (d)
- 3.
- **4.** (a)

- **5.** (c)
- **6.** (b)
- 7.

(c)

(c)