

RD SHARMA

Solutions

Class 7 Maths

Chapter 18

Ex 18.1

Q1 . State the number of lines of symmetry for the following figures:

(i) An equilateral triangle

(ii) An isosceles triangle

(iii) A scalene triangle

(iv) A rectangle

(v) A rhombus

(vi) A square

(vii) A parallelogram

(viii) A quadrilateral

(ix) A regular pentagon

(x) A regular hexagon

(xi) A circle

(xii) A semi-circle

Ans:

(i) An equilateral triangle has 3 lines of symmetry.

(ii) An isosceles triangle has 1 line of symmetry.

(iii) A scalene triangle has no line of symmetry.

(iv) A rectangle has 2 lines of symmetry.

(v) A rhombus has 2 lines of symmetry.

(vi) A square has 4 lines of symmetry.

(vii) A parallelogram has no line of symmetry.

(viii) A quadrilateral has no line of symmetry.

(ix) A regular pentagon has 5 lines of symmetry.

(x) A regular hexagon has 6 lines of symmetry.

(xi) A circle has an infinite number of lines of symmetry all along the diameters.

(xii) A semicircle has only one line of symmetry.

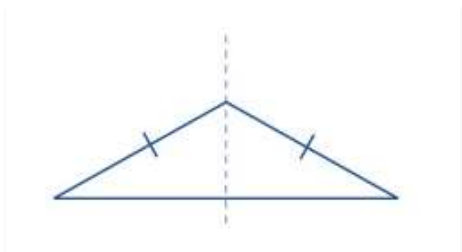
Q2. What other name can you give to the line of symmetry of

(i) An isosceles triangle?

(ii) A circle?

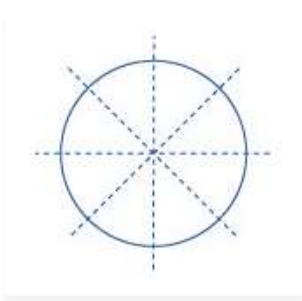
Ans:

(i) An isosceles triangle has only 1 line of symmetry.



This line of symmetry is also known as the altitude of an isosceles triangle.

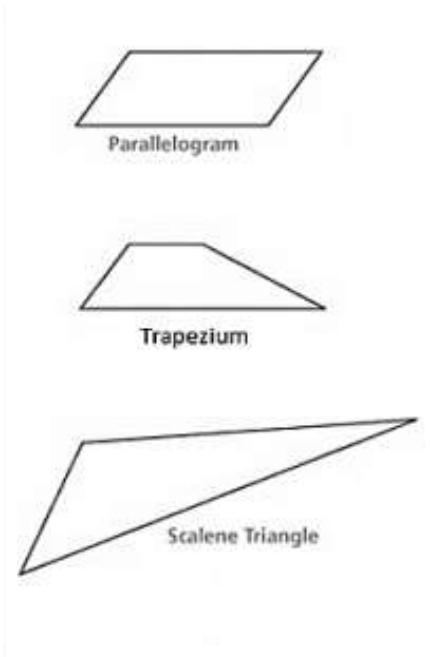
(ii) A circle has infinite lines of symmetry all along its diameters.



Q3. Identify three examples of shapes with no line of symmetry.

Ans:

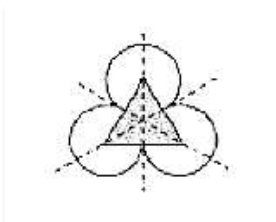
A scalene triangle, a parallelogram and a trapezium do not have any line of symmetry.



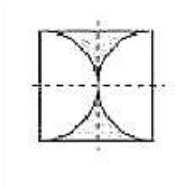
Q4. Identify multiple lines of symmetry, if any, in each of the following figures:

Ans:

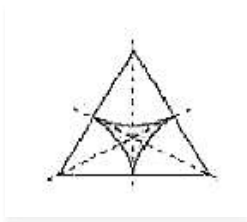
(A) The given figure has 3 lines of symmetry. Therefore it has multiple lines of symmetry.



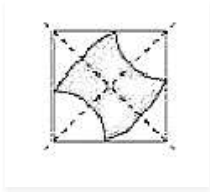
(B) The given figure has 2 lines of symmetry. Therefore it has multiple lines of symmetry.



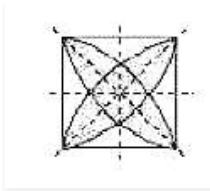
(C) The given figure has 3 lines of symmetry. Therefore it has multiple lines of symmetry.



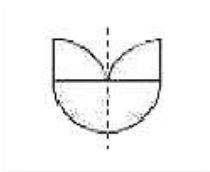
(D) The given figure has 2 lines of symmetry. Therefore it has multiple lines of symmetry.



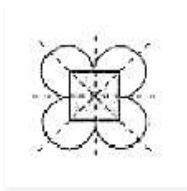
(E) The given figure has 4 lines of symmetry. Therefore it has multiple lines of symmetry.



(F) The given figure has only 1 line of symmetry.



(G) The given figure has 4 lines of symmetry. Therefore it has multiple lines of symmetry.



(H) The given figure has 6 lines of symmetry. Therefore it has multiple lines of symmetry.

