EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Exploring Geometrical Figures

Grade : SSC Grade VIII

1. The English alphabet letter 'A' has how many lines of symmetry?

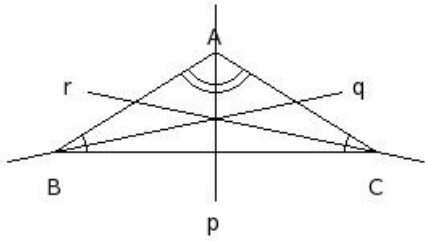
   (i) one (ii) zero (iii) two (iv) infinite (v) three

2. Which of the following are true?

   a) If a polygon is not regular, it will have less number of axes of symmetry than the number of sides.
   b) Lines of symmetry of a regular polygon are nothing but the diagonals of a regular polygon.
   c) If a triangle has two lines of symmetry, then it is a regular polygon.
   d) A regular polygon of n sides will have n lines of symmetry.
   e) Line of symmetry divides the polygon into two identical shapes.
   f) An n-sided regular polygon has n/2 lines of symmetry if n is even.
   g) If a quadrilateral has four lines of symmetry, then it is a regular polygon.

   (i) {a,d,e,g} (ii) {c,d} (iii) {f,b,e} (iv) {c,g,a} (v) {b,a}

3. Identify the line(s) of symmetry in the following figure



   (i) { p, q, r } (ii) r (iii) none (iv) p (v) q

4. Which of the following figures have point symmetry?

   a) regular octagon
   b) regular pentagon
   c) regular heptagon
   d) semicircle
   e) sector of a circle
   f) circle
   g) regular hexagon

   (i) {b,a} (ii) {a,f,g} (iii) {c,f} (iv) {b,a,f} (v) {d,e,g}

5. Which of the following quadrilaterals have two lines of symmetry?

   a) kite
   b) parallelogram
   c) trapezium
   d) isosceles trapezium
   e) square
   f) rectangle
   g) rhombus

   (i) {c,d,f} (ii) {a,f} (iii) {f,g} (iv) {b,g} (v) {e,g,f}

6. A median is an axis of symmetry in which of the given figures?

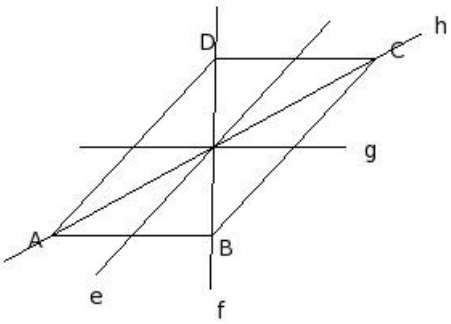
a) scalene triangle
b) equilateral triangle
c) isosceles triangle
d) isosceles right angled triangle
e) right angle triangle

(i) {a,b,c} (ii) {a,b} (iii) {b,c,d} (iv) {e,c} (v) {a,e,d}

7. Which of the following English alphabet letters have infinite lines of symmetry?

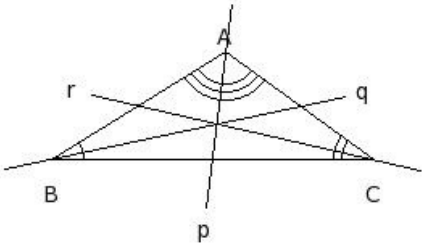
(i) O (ii) A (iii) H (iv) I (v) K

8. Which of the following are line(s) of symmetry for the given parallelogram?



(i) e (ii) none (iii) { e, g } (iv) { e, f, g, h } (v) g

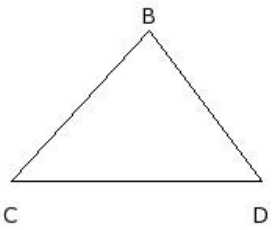
9. Identify the line(s) of symmetry in the following figure

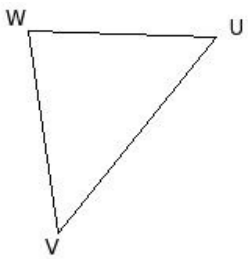


(i) none (ii) p (iii) { p, q, r } (iv) r (v) q

10. In the given figure, △BCD ≅ △WVU. Which of the following are true?

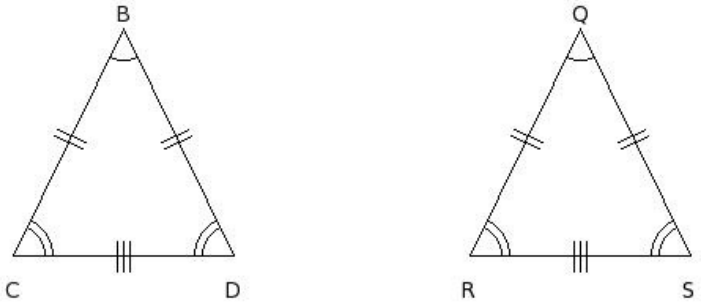
a) CD = VU
b) ∠B = ∠U
c) ∠C = ∠V
d) CD = WV
e) ∠D = ∠U





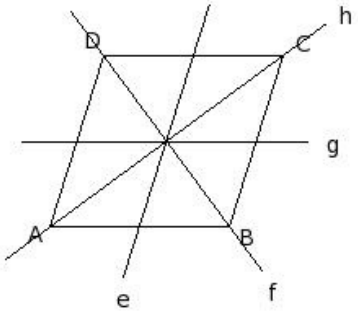
(i) {b,a,c} (ii) {b,a} (iii) {d,c} (iv) {a,c,e} (v) {b,d,e}

11. In the given figure, which of the following is true?



(i) △BCD ≅ △SRQ (ii) △BCD ≅ △SQR (iii) △BCD ≅ △RSQ (iv) △BCD ≅ △QRS (v) △CDB ≅ △QRS

12. Which of the following are line(s) of symmetry for the given rhombus?



(i) h (ii) g (iii) { e, f, g, h } (iv) e (v) { f, h }

13. Which of the following English alphabet letters have zero lines of symmetry?

(i) P (ii) E (iii) X (iv) H (v) U

14. The English alphabet letter 'O' has how many lines of symmetry?

(i) one (ii) infinite (iii) two (iv) three (v) zero

15. The English alphabet letter 'H' has how many lines of symmetry?

(i) one (ii) two (iii) zero (iv) three (v) infinite

16. Which of the following figures have point symmetry?

a) isosceles triangle
b) line segment
c) isosceles right angled triangle
d) equilateral triangle
e) scalene triangle
f) right angle triangle

(i) {a,b} (ii) {b} (iii) {c,b} (iv) {f,b} (v) {d,e,b}

17. Which of the following English alphabet letters has rotational symmetry?

(i) D (ii) B (iii) Z (iv) A (v) F

18. Which of the following English alphabet letters have one line of symmetry?

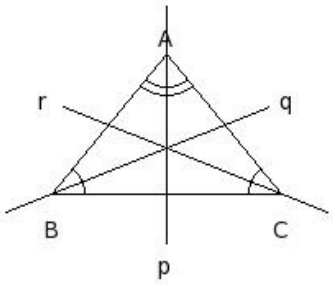
(i) E (ii) X (iii) L (iv) F (v) H

19. Which of the following figures have no line of symmetry?

a) isosceles triangle
b) line segment
c) angle with unequal arms
d) scalene triangle
e) angle with equal arms
f) equilateral triangle

(i) {b,d} (ii) {e,f,c} (iii) {c,d} (iv) {a,c} (v) {a,d,c}

20. Identify the line(s) of symmetry in the following figure



(i) r (ii) p (iii) q (iv) { p, q, r } (v) none

21. Which of the following are necessary conditions for similarity of two polygons ?

a) The corresponding sides are proportional.
b) The corresponding sides are equal.
c) The corresponding angles are proportional.
d) The corresponding angles are equal.

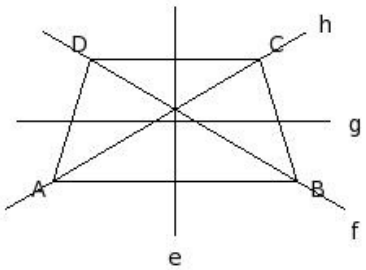
(i) {a,d} (ii) {b,a} (iii) {b,c,a} (iv) {b,d,a} (v) {c,d}

22. Which of the following are true?

a) Similarity is reflexive.
b) Similarity is symmetric.
c) Similarity is anti symmetric.
d) Similarity is transitive.

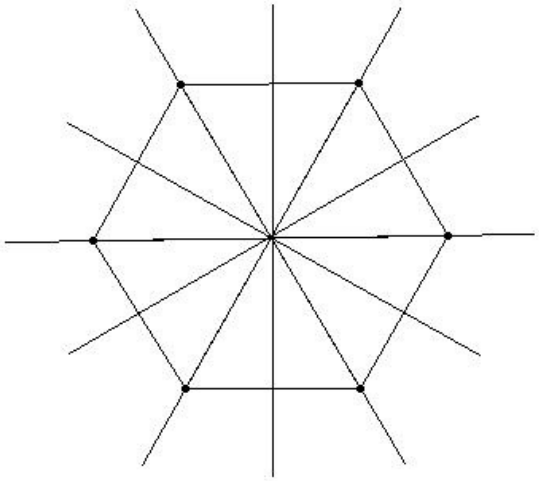
(i) {c,a} (ii) {a,b,d} (iii) {c,a,b} (iv) {c,d} (v) {c,b}

23. Which of the following are line(s) of symmetry for the given isosceles trapezium?



(i) { e, f, g, h } (ii) none (iii) f (iv) h (v) e

24. Given figure has how many lines of symmetry?



(i) 5 (ii) 4 (iii) 7 (iv) 6 (v) 9

25. Which of the following quadrilaterals have one line of symmetry?

a) isosceles trapezium
b) square
c) kite
d) rectangle
e) rhombus
f) parallelogram
g) trapezium

(i) {e,f,a} (ii) {g,c,a} (iii) {d,c} (iv) {b,a} (v) {a,c}

Assignment Key

1) (i)	2) (i)	3) (iv)	4) (ii)	5) (iii)	6) (iii)
7) (i)	8) (ii)	9) (i)	10) (iv)	11) (iv)	12) (v)
13) (i)	14) (ii)	15) (ii)	16) (ii)	17) (iii)	18) (i)
19) (iii)	20) (ii)	21) (i)	22) (ii)	23) (v)	24) (iv)
25) (v)					