EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Exploring Geometrical Figures

Grade : SSC Grade VIII

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

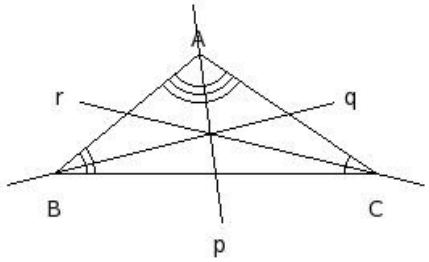
   (i) W (ii) H (iii) K (iv) O (v) X

2. Which of the following are true?

   a) If two figures are similar, then they are congruent too.
   b) Similar and congruent are not synonymous.
   c) If two figures are congruent, then they are similar too.
   d) Similar figures have same area.
   e) Congruent figures have same area.

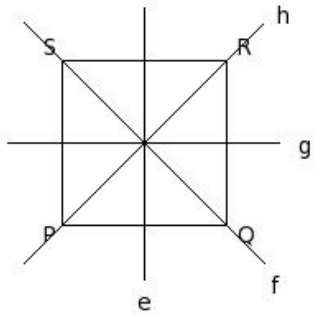
   (i) {a,d,e} (ii) {a,b,c} (iii) {a,b} (iv) {d,c} (v) {b,c,e}

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



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

4. Which of the following are line(s) of symmetry for the given square?



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

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

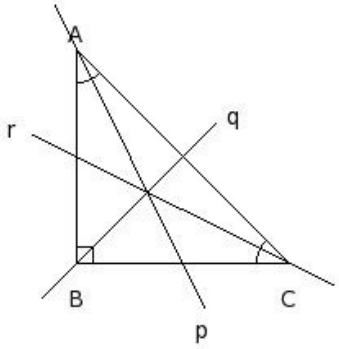
   (i) C (ii) I (iii) D (iv) T (v) F

6. Which of the following are true?

   a) A semi-circle is a polygonal region.
   b) A sector is a polygonal region.
   c) A square is a polygonal region.
   d) A circle is a polygonal region.
   e) A triangle is a polygonal region.

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

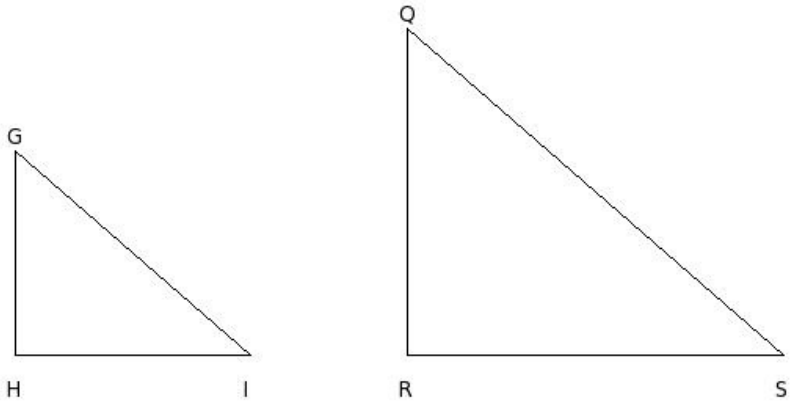
7. Identify the line(s) of symmetry in the following figure



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

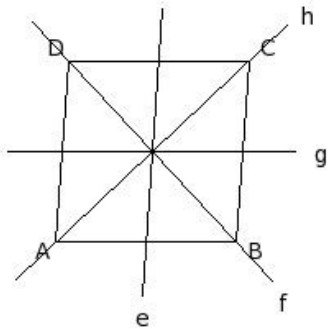
A vertical stick 13 m long casts a shadow of 15 m long on the ground.

8. At the same time, a tower casts the shadow 120 m long on the ground.
Find the height of the tower.



(i) 102 m (ii) 103 m (iii) 105 m (iv) 106 m (v) 104 m

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



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

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

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

11. Which of the following figures have all symmetries viz. line symmetry, point symmetry and rotational symmetry?

a) angle with equal arms
b) square
c) parallelogram
d) line segment
e) regular hexagon
f) circle
g) regular pentagon
h) equilateral triangle

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

12. Which of the following quadrilaterals have point symmetry?

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

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

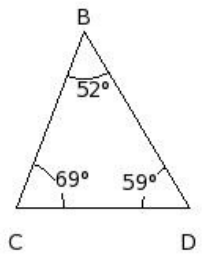
13. Which of the following quadrilaterals have four lines of symmetry?

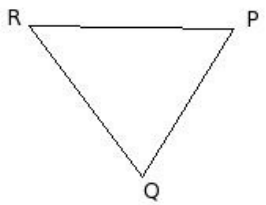
a) isosceles trapezium
b) rhombus
c) kite
d) rectangle
e) square
f) parallelogram
g) trapezium

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

14. In the given figure, △BCD ≅ △RQP. Which of the following are true?

a) ∠Q = 69°
b) ∠R = 52°
c) ∠P = 52°
d) ∠Q = 59°
e) ∠P = 59°
f) ∠R = 69°



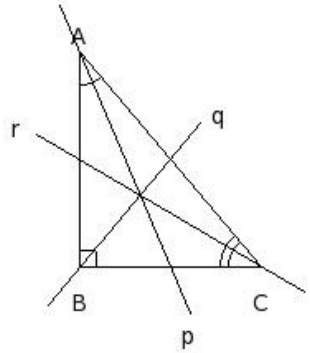


(i) {a,b,e} (ii) {c,a} (iii) {d,a,b} (iv) {f,c,e} (v) {d,b}

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

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

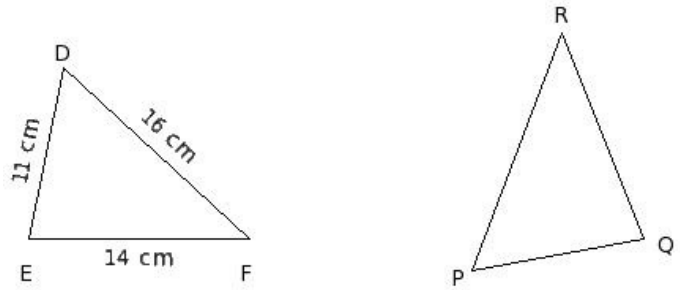
16. Identify the line(s) of symmetry in the following figure



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

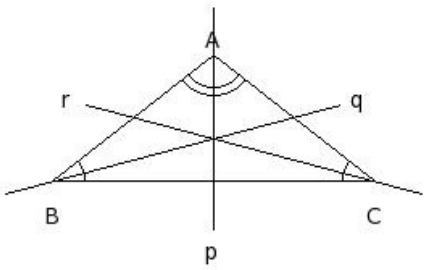
17. In the given figure, △DEF ≅ △PQR. Which of the following are true?

a) RP = 11 cm
b) QR = 14 cm
c) RP = 16 cm
d) PQ = 14 cm
e) QR = 11 cm
f) PQ = 11 cm



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

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



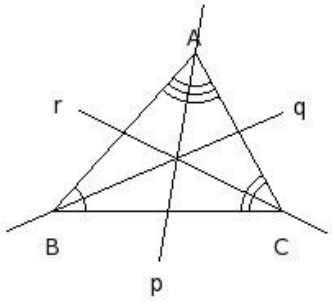
(i) p (ii) { p, q, r } (iii) q (iv) r (v) none

19. Which of the following quadrilaterals have no rotational symmetry?

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

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

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



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

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

(i) A (ii) X (iii) I (iv) D (v) N

22. Which of the following triangles have rotational symmetry?

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

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

23. Which of the following English alphabet letters have two lines of symmetry?

(i) X (ii) B (iii) Z (iv) V (v) S

24. Which of the following are true?

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

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

25. The English alphabet letter 'Z' has how many lines of symmetry?

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

Assignment Key

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