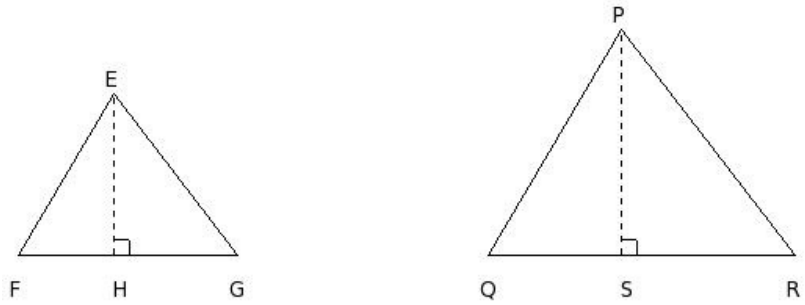
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Exploring Geometrical Figures

Grade : SSC Grade VIII

1. In the given figure, △EFG & △PQR are similar triangles. If the ratio of the heights EH : PS = 10 : 14, then the ratio of their areas is



(i) 99 sq.cm : 196 sq.cm (ii) 100 sq.cm : 199 sq.cm (iii) 100 sq.cm : 193 sq.cm (iv) 101 sq.cm : 196 sq.cm

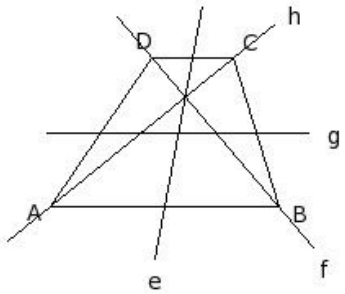
(v) 100 sq.cm : 196 sq.cm

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

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

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

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



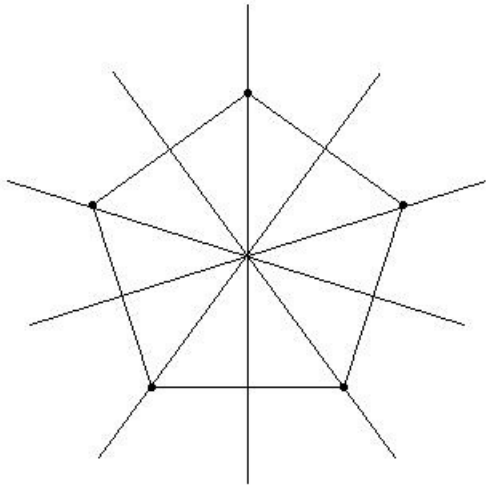
(i) { e, g } (ii) { e, f, g, h } (iii) e (iv) { f, h } (v) none

4. Which of the following are true?

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

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

5. Given figure has how many lines of symmetry?



(i) 5 (ii) 2 (iii) 8 (iv) 4 (v) 6

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

(i) M (ii) A (iii) I (iv) J (v) H

7. Which of the following quadrilaterals have zero lines of symmetry?

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

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

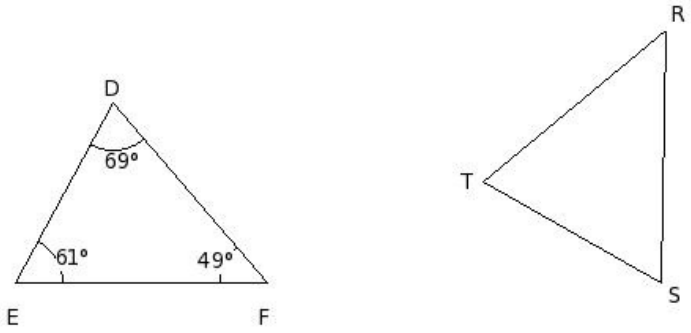
8. Which of the following figures have point symmetry?

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

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

9. In the given figure, △DEF ≅ △TSR. Which of the following are true?

a) ∠S = 49°
b) ∠R = 49°
c) ∠T = 69°
d) ∠T = 61°
e) ∠R = 69°
f) ∠S = 61°



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

10. If a figure has rotational symmetry of order 9, then it regain its shape after being rotated by an angle of

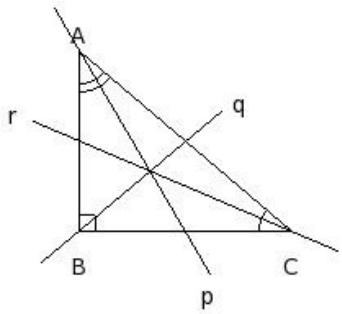
(i) 45° (ii) 35° (iii) 40° (iv) 43° (v) 37°

11. Which of the following are true?

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

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

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



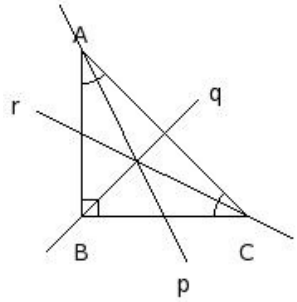
(i) q (ii) { p, q, r } (iii) p (iv) none (v) r

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

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

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

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



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

15. Which of the following figures have two lines of symmetry?

a) isosceles trapezium
b) rectangle
c) isosceles triangle
d) line segment
e) angle with equal arms
f) square
g) kite
h) scalene triangle

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

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

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

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

17. Which of the following triangles have rotational symmetry?

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

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

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

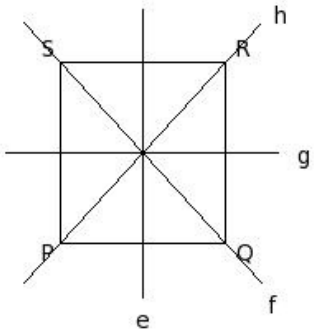
a) isosceles trapezium
b) rectangle
c) parallelogram
d) kite
e) square
f) trapezium
g) rhombus

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

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

(i) X (ii) M (iii) I (iv) O (v) D

20. Which of the following are line(s) of symmetry for the given rectangle?

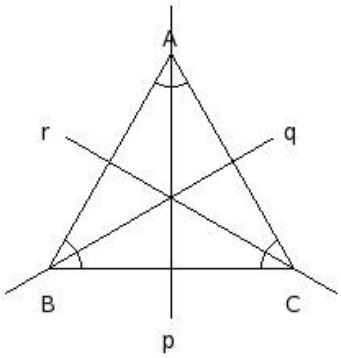


(i) { e, g } (ii) none (iii) h (iv) { f, h } (v) e

21. A figure possesses point symmetry if it regain its shape after rotating

(i) 90° (ii) 180° (iii) 270° (iv) 360°

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



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

23. Which of the following figures have three lines of symmetry?

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

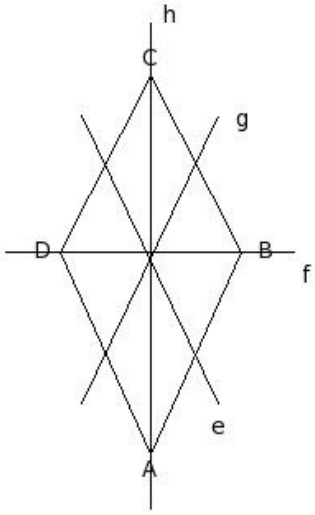
(i) {c} (ii) {f,c} (iii) {b,c} (iv) {d,e,c} (v) {a,c}

24. A figure possesses rotational symmetry if it regain its shape after rotating

a) 90°
b) 270°
c) 360°
d) 180°

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

25. Which of the following are line(s) of symmetry for the given kite?



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

Assignment Key

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