EduSahara™ Assignment

Name : Polygons

Chapter : Understanding Quadrilaterals

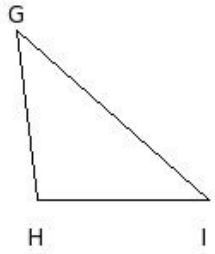
Grade : CBSE Grade VIII



1. Every simple closed curve divides a plane into how many sets of points?

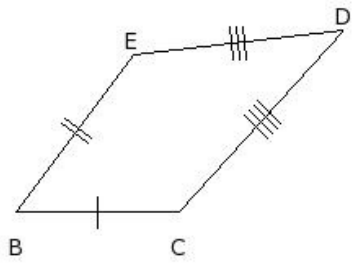
   (i) 2 (ii) 3 (iii) 4 (iv) 0 (v) 6

2. Identify the figure below



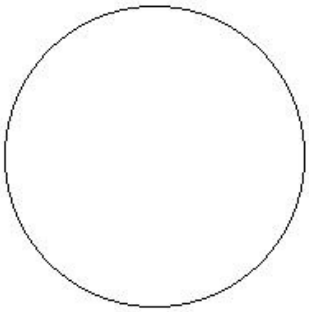

   (i) decagon (ii) triangle (iii) quadrilateral (iv) nonagon (v) angle

3. Identify the figure below



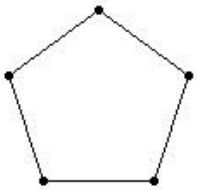

   (i) circle (ii) nonagon (iii) pentagon (iv) quadrilateral (v) heptagon

4. Identify the figure below



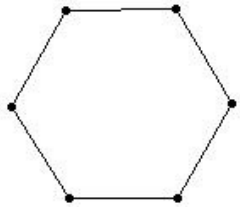
   (i) heptagon (ii) circle (iii) quadrilateral (iv) hexagon (v) angle

5. Identify the figure below



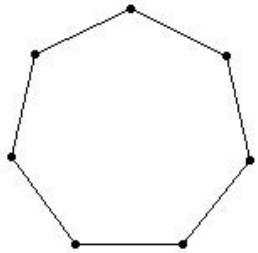
   (i) nonagon (ii) quadrilateral (iii) heptagon (iv) pentagon (v) angle

6. Identify the figure below



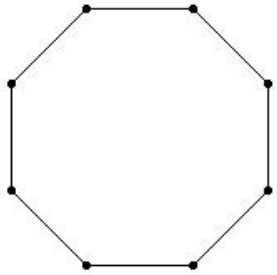
(i) octagon (ii) hexagon (iii) heptagon (iv) pentagon (v) nonagon

7. Identify the figure below



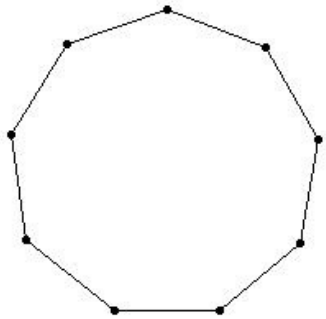
(i) pentagon (ii) heptagon (iii) quadrilateral (iv) angle (v) triangle

8. Identify the figure below



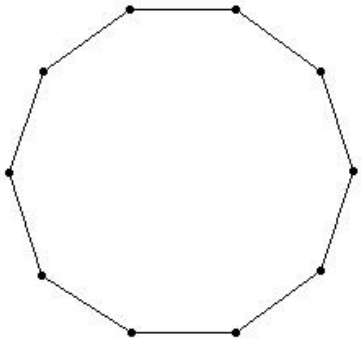
(i) octagon (ii) angle (iii) heptagon (iv) quadrilateral (v) hexagon

9. Identify the figure below



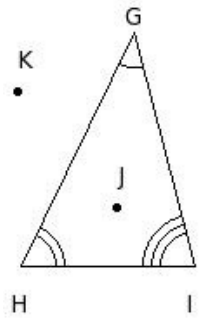
(i) heptagon (ii) pentagon (iii) hexagon (iv) decagon (v) nonagon

10. Identify the figure below



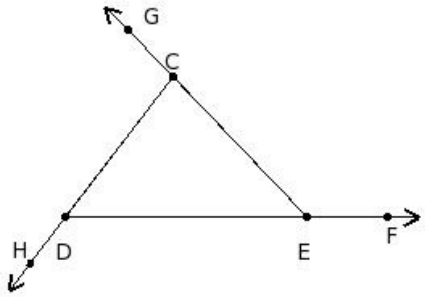
(i) decagon (ii) octagon (iii) hexagon (iv) quadrilateral (v) heptagon

11. The angles of the triangle are




(i) ∠H , ∠I , ∠J (ii) ∠H , ∠I , ∠K (iii) ∠I , ∠J , ∠K (iv) ∠G , ∠H , ∠I (v) ∠G , ∠H , ∠J

12. The exterior angles of the triangle are




(i) ∠EFC , ∠FCD , ∠GDF (ii) ∠FEC , ∠GCD , ∠HDE (iii) ∠FGD , ∠GDE , ∠HEG (iv) ∠GFD , ∠HDE , ∠IEF

(v) ∠HGE , ∠IEF , ∠JFG

13. Sum of the interior angles in a triangle is

(i) 180° (ii) 185° (iii) 195° (iv) 190° (v) 210°

14. Sum of the interior angles in a quadrilateral is

(i) 360° (ii) 375° (iii) 365° (iv) 390° (v) 370°

15. Sum of the interior angles in a pentagon is

(i) 540° (ii) 550° (iii) 570° (iv) 545° (v) 555°

16. Sum of the interior angles in a hexagon is

(i) 735° (ii) 730° (iii) 725° (iv) 750° (v) 720°

17. Sum of the interior angles in a heptagon is

(i) 930° (ii) 915° (iii) 910° (iv) 905° (v) 900°

18. Sum of the interior angles in an octagon is

(i) 1090° (ii) 1085° (iii) 1080° (iv) 1110° (v) 1095°

19. Sum of the interior angles in a nonagon is

(i) 1260° (ii) 1265° (iii) 1270° (iv) 1275° (v) 1290°

20. Sum of the interior angles in a decagon is

(i) 1445° (ii) 1450° (iii) 1470° (iv) 1455° (v) 1440°

21. How many diagonals does a triangle have?

(i) 3 (ii) 2 (iii) 1 (iv) 0 (v) 4

22. How many diagonals does a quadrilateral have?

(i) 4 (ii) 3 (iii) 0 (iv) 2 (v) 1

23. How many diagonals does a pentagon have?

(i) 3 (ii) 6 (iii) 4 (iv) 5 (v) 7

24. How many diagonals does a hexagon have?

(i) 10 (ii) 9 (iii) 11 (iv) 8 (v) 7

25. How many diagonals does a heptagon have?

(i) 16 (ii) 13 (iii) 11 (iv) 15 (v) 14

26. How many diagonals does an octagon have?

(i) 19 (ii) 21 (iii) 18 (iv) 23 (v) 20

27. How many diagonals does a nonagon have?

(i) 28 (ii) 25 (iii) 26 (iv) 29 (v) 27

28. How many diagonals does a decagon have?

(i) 34 (ii) 38 (iii) 33 (iv) 36 (v) 35

29. Find the number of sides in a regular polygon if each interior angle is 144°

(i) 10 (ii) 8 (iii) 9 (iv) 12 (v) 11

30. Find the number of sides in a regular polygon if each exterior angle is 40°

(i) 9 (ii) 8 (iii) 6 (iv) 10 (v) 12

31. The value of each exterior angle in an n-sided regular polygon is

(i) $\left(\frac{360}{n}\right)^\circ$ (ii) $\left(\frac{n}{360}\right)^\circ$ (iii) $\left[\frac{(2n - 4) \times 90}{n}\right]^\circ$ (iv) $\left[\frac{(2n - 4) \times 180}{n}\right]^\circ$

32. The value of each interior angle in an n-sided regular polygon is

(i) $\left[\frac{(2n - 4) \times 180}{n}\right]^\circ$ (ii) $\left(\frac{360}{n}\right)^\circ$ (iii) $\left(\frac{n}{360}\right)^\circ$ (iv) $\left[\frac{(2n - 4) \times 90}{n}\right]^\circ$

33. The value of the exterior angle in a regular polygon when the interior angle is given

(i) 90°+ (interior angle) (ii) 180°- (interior angle) (iii) 180°+ (interior angle) (iv) 360°- (interior angle)

34. The value of the interior angle in a regular polygon when the exterior angle is given

(i) 360°- (exterior angle) (ii) 180°- (exterior angle) (iii) 90°+ (exterior angle) (iv) 180°+ (exterior angle)

35. Find the number of sides in a regular polygon if each interior angle is 156°

(i) 18 (ii) 16 (iii) 15 (iv) 14 (v) 12

36. Find the number of sides in a regular polygon if each exterior angle is 9°

(i) 40 (ii) 43 (iii) 39 (iv) 38 (v) 41

37. The number of diagonals in a regular polygon with n sides is

(i) $\frac{(n)(n-2)}{2}$ (ii) $\frac{(n)(n+3)}{2}$ (iii) $\frac{(n)(n-1)}{2}$ (iv) $\frac{(n)(n+2)}{2}$ (v) $\frac{(n)(n-3)}{2}$

## Assignment Key

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|---|---|---|---|---|---|
| 1) (ii) | 2) (ii) | 3) (iv) | 4) (ii) | 5) (iv) | 6) (ii) |
| 7) (ii) | 8) (i) | 9) (v) | 10) (i) | 11) (iv) | 12) (ii) |
| 13) (i) | 14) (i) | 15) (i) | 16) (v) | 17) (v) | 18) (iii) |
| 19) (i) | 20) (v) | 21) (iv) | 22) (iv) | 23) (iv) | 24) (ii) |
| 25) (v) | 26) (v) | 27) (v) | 28) (v) | 29) (i) | 30) (i) |
| 31) (i) | 32) (iv) | 33) (ii) | 34) (ii) | 35) (iii) | 36) (i) |
| 37) (v) | | | | | |