## Polygon Worksheet - 1

1. A polygon in which at least one angle is more than $180^{\circ}$ is known as convex polygon. Mark True / False.
a) True
b) False
2. A polygon in which each angle is less than $180^{\circ}$ is known as a concave polygon. Mark True / False.
a) True
b) False
3. A polygon having all sides equal and all angles equal is known as a regular polygon. Mark True / False.
a) True
b) False
4. Square is not a regular polygon. Mark True / False.
a) True
b) False
5. Rectangle is a regular polygon. Mark True / False.
a) True
b) False
6. Rhombus is an irregular polygon. Mark True / False.
a) True
b) False
7. Sum of all exterior angles of a polygon is equal to $180^{\circ}$. Mark True / False.
a) True
b) False
8. Line segment joining any two nonconsecutive vertices of a polygon is known as its diagonal. Mark True / False.
a) True
b) False
9. If a polygon has ' $n$ ' sides, then the number of triangles formed will be $n-3$. Mark True / False.
a) True
b) False
10. A parallelogram can be a regular polygon. Mark True / False.
a) True
b) False
11. If a regular polygon has 12 sides, then find the sum of all its exterior angles.
a) $90^{\circ}$
b) $180^{\circ}$
c) $270^{\circ}$
d) $360^{\circ}$
12. How many diagonals are there in a pentagon?
a) 4
b) 5
c) 6
d) 7
13. How many diagonals are there in an octagon?
a) 10
b) 15
c) $\quad 18$
d) 20
14. How many diagonals are there in a polygon having 12 sides?
a) 48
b) 50
c) 54
d) 56
15. A polygon is having 27 diagonals. How many sides does it have?
a) 6
b) 7
c) 8
d) 9
16. A regular polygon is having exterior angle $35^{\circ}$. What will be its interior angle?
a) $120^{\circ}$
b) $135^{\circ}$
c) $145^{\circ}$
d) $155^{\circ}$
17. A regular polygon having 8 sides, find the exterior angles.
a) $30^{\circ}$
b) $45^{\circ}$
c) $55^{\circ}$
d) $65^{\circ}$
18. A regular polygon having 12 sides, find the interior angles.
a) $130^{\circ}$
b) $30^{\circ}$
c) $150^{\circ}$
d) $60^{\circ}$
19. Each interior angle of a regular decagon is equal to $\qquad$ .
a) $130^{\circ}$
b) $144^{\circ}$
c) $150^{\circ}$
d) $36^{\circ}$
20. What is the sum of all interior angles of a regular pentagon?
a) $130^{\circ}$
b) $540^{\circ}$
c) $450^{\circ}$
d) $360^{\circ}$
