## Parallelogram Worksheet - 1

1. Opposite sides of a parallelogram are equal. Mark True / False.
a) True
b) False
2. Opposite angles of a parallelogram are not equal. Mark True / False.
a) True
b) False
3. Parallelogram diagonals do not bisect each other. Mark True / False.
a) True
b) False
4. If the opposite sides of a quadrilateral are equal then it is a parallelogram. Mark True / False.
a) True
b) False
5. If the opposite angles of a quadrilateral are not equal then it is a parallelogram. Mark True / False.
a) True
b) False
6. Diagonals of a parallelogram never bisects it into two equal triangles. Mark True / False.
a) True
b) False
7. The diagonals of a parallelogram are equal. Mark True / False.
a) True
b) False
8. Sum of adjacent angles of a parallelogram is equal to $180^{\circ}$. Mark True / False.
a) True
b) False
9. Sum of all the angles of a parallelogram is less than or equal to $360^{\circ}$. Mark True / False.
a) True
b) False
10. The diagonals of a parallelogram bisect each other at right angles. Mark True / False.
a) True
b) False
11. If two adjacent angles of a parallelogram are $(5 p-10)^{\circ}$ and $(p+10)^{\circ}$, then find both the angles.
a) $\quad 135^{\circ}$ and $45^{\circ}$
b) $\quad 125^{\circ}$ and $55^{\circ}$
c) $140^{\circ}$ and $40^{\circ}$
d) $\quad 145^{\circ}$ and $35^{\circ}$
12. Two adjacent angles of a parallelogram are as $2: 3$. Find the measure of all the angles.
a) $36^{\circ}, 72^{\circ}, 36^{\circ}, 72^{\circ}$
b) $72^{\circ}, 108^{\circ}, 36^{\circ}, 108^{\circ}$
c) $140^{\circ}, 40^{\circ}, 140^{\circ}, 40^{\circ}$
d) $72^{\circ}, 108^{\circ}, 72^{\circ}, 108^{\circ}$
13. Two adjacent angles of a parallelogram are equal. What is the measure of each angle?
a) $60^{\circ}$
b) $180^{\circ}$
c) $\quad 90^{\circ}$
d) $270^{\circ}$
14. In a $A B C D$ parallelogram, $\angle A=110^{\circ}$, find $\angle B, \angle C$ and $\angle D$.
a) $\angle \mathrm{B}=65^{\circ}, \angle \mathrm{C}=110^{\circ}$ and $\angle \mathrm{D}=65^{\circ}$
b) $\angle \mathrm{B}=70^{\circ}, \angle \mathrm{C}=100^{\circ}$ and $\angle \mathrm{D}=70^{\circ}$
c) $\angle \mathrm{B}=75^{\circ}, \angle \mathrm{C}=110^{\circ}$ and $\angle \mathrm{D}=75^{\circ}$
d) $\angle \mathrm{B}=70^{\circ}, \angle \mathrm{C}=110^{\circ}$ and $\angle \mathrm{D}=70^{\circ}$
15. In the below mentioned figure $A B C D$ is a parallelogram. Find the value of $p, q$ and $r$.

a) $\quad \mathrm{p}=110^{\circ}, \mathrm{q}=65^{\circ}$ and $\mathrm{r}=110^{\circ}$
b) $\quad \mathrm{p}=70^{\circ}, \mathrm{q}=110^{\circ}$ and $\mathrm{r}=70^{\circ}$
c) $p=110^{\circ}, q=70^{\circ}$ and $r=110^{\circ}$
d) $\quad \mathrm{p}=70^{\circ}, \mathrm{q}=110^{\circ}$ and $\mathrm{r}=70^{\circ}$
16. If an angle of a parallelogram is one-fifth of it's adjacent angle, then find all the angles of the parallelogram.
a) $36^{\circ}, 72^{\circ}, 36^{\circ}, 72^{\circ}$
b) $150^{\circ}, 30^{\circ}, 150^{\circ}, 30^{\circ}$
c) $140^{\circ}, 40^{\circ}, 140^{\circ}, 40^{\circ}$
d) $72^{\circ}, 108^{\circ}, 72^{\circ}, 108^{\circ}$
17. The sum of opposite angles of a parallelogram is equal to $150^{\circ}$. Find the sum of other two opposite angles.
a) $210^{\circ}$
b) $180^{\circ}$
c) $190^{\circ}$
d) $270^{\circ}$
18. In the below given parallelogram find the value of $p$ and $q$.

a) $\quad \mathrm{p}=6$ and $\mathrm{q}=8$
b) $\quad \mathrm{p}=8$ and $\mathrm{q}=6$
c) $\quad \mathrm{p}=6$ and $\mathrm{q}=12$
d) $\quad \mathrm{p}=6$ and $\mathrm{q}=10$
19. Two adjacent angles of a parallelogram are $(3 a-10)^{\circ}$ and $(3 a+40)^{\circ}$. Find both the adjacent angles.
a) $\quad 65^{\circ}$ and $110^{\circ}$
b) $\quad 55^{\circ}$ and $115^{\circ}$
c) $\quad 65^{\circ}$ and $115^{\circ}$
d) $\quad 115^{\circ}$ and $75^{\circ}$
20. The perimeter of a parallelogram is 150 cm . One of its side is greater than the other side by 35 cm . Find the length of all the sides of the parallelogram.
a) $\quad 20 \mathrm{~cm}$ and 35 cm
b) $\quad 20 \mathrm{~cm}$ and 55 cm
c) $\quad 35 \mathrm{~cm}$ and 70 cm
d) None of these
