Sample Paper Class 9th
Ch- 9 Areas of Parallelograms and Triangles

Section A: (1 mark each)

1. **Define the area of a parallelogram.**
2. **State the formula for the area of a triangle.**
3. **If the base of a triangle is 8 cm and its height is 6 cm, find the area.**
4. **What is the area of a parallelogram with base 10 cm and height 5 cm?**
5. **In a parallelogram, the base is 12 cm and the height is 7 cm. Calculate the area.**

Section B: (2 marks each)

6. **Find the area of a triangle with a base of 12 cm and height 8 cm.**
7. **If the area of a parallelogram is 48 cm² and the base is 6 cm, find its height.**
8. **A triangle has a base of 20 cm and height of 15 cm. Find the area of the triangle.**
9. **If the area of a parallelogram is 72 cm² and its height is 9 cm, what is its base?**
10. **Find the area of a triangle with base 10 cm and height 9 cm.**

Section C: (3 marks each)

11. **A triangle and a parallelogram have the same base and height. If the area of the parallelogram is 40 cm², what is the area of the triangle?**
12. **A parallelogram has a base of 15 cm and height 6 cm. Another parallelogram has a base of 10 cm and the same height. Find the area of both parallelograms.**
13. **The area of a triangle is 60 cm², and its base is 12 cm. Find its height.**
14. **In a parallelogram, one side is 5 cm and the height is 3 cm. Find the area of the parallelogram.**

Section D: (4 marks each)

15. **Find the area of a triangle with a base of 18 cm and a height of 12 cm.**
16. **A parallelogram has a base of 10 cm and a height of 8 cm. Find the area of the parallelogram and the area of a triangle formed by one of its diagonals.**
17. **A parallelogram has an area of 96 cm². If the base is 12 cm, find the height of the parallelogram and the diagonal lengths.**
18. **A triangle has a base of 16 cm and a height of 9 cm. Calculate the area of the triangle and then compare it with the area of a rectangle having the same base and height.**
19. **In a triangle, the base is 25 cm and the height is 15 cm. Find the area of the triangle, and also verify using the area of a parallelogram.**

Section E: (5 marks each)

20. **The base of a triangle is 20 cm, and its height is 18 cm. Find its area and then calculate the area of a parallelogram that has the same base and height.**

21. **If the area of a triangle is 72 cm² and its base is 18 cm, calculate the height of the triangle and the base and height of a parallelogram with an equivalent area.**