Q1. Find the area bounded by the curve \( y = \sqrt{4-x} \), x-axis and y-axis.

Q2. Find the area bounded by the curves \( y = x^2 \) and \( x^2 + y^2 = 2 \) above x-axis.

Q3. Find the area bounded by \( y = x^2 - 4 \) and \( x = y = 2 \).

Q4. Find the area bounded by the circle \( x^2 + y^2 = a^2 \).

Q5. Find the area bounded by the curves :-
\( x^2 + y^2 = 4a^2 \) and \( y^2 = 3ax \).

Q6. Find the area bounded by hyperbola \( x^2 - y^2 = a^2 \) and the line \( x = 2a \).

Q7. Find the area bounded by the parabola \( y = x^2 \), x-axis and the tangent to the parabola at (1, 1).

Q8. Find the area bounded by the circle \( x^2 + y^2 = 64 \) which is exterior to the parabola \( y^2 = 12x \).

Q9. Draw the rough sketch of the curve \( y = |x + 1| \) and evaluate the area bounded by the curve and the x-axis between \( x = -4 \) and \( x = 2 \).

Q10. Using integration find the area of the triangular region with vertices (1, 0), (2, 2) and (3, 1).

Q11. Calculate the area of the region enclosed between the circles \( x^2 + y^2 = 16 \) and \( (x - 2)^2 + y^2 = 4 \).

Q12. Find the area of the region bounded by the curve \( y = x^2 + 2 \) and the lines \( y = x, x = 0, \) and \( x = 3 \).

Q13. Find the area of the region \( \{(x, y): x + y \leq 1 \leq x + y\} \).

Q14. Using integration, find the area of the region :-
\( \{(x, y): y^2 \leq 4x, 4x^2 + 4y^2 < 9 \} \).

Q15. Using integration, find the area of the region enclosed between the circles \( x^2 + y^2 = 4 \) and \( (x - 2)^2 + y^2 = 4 \).