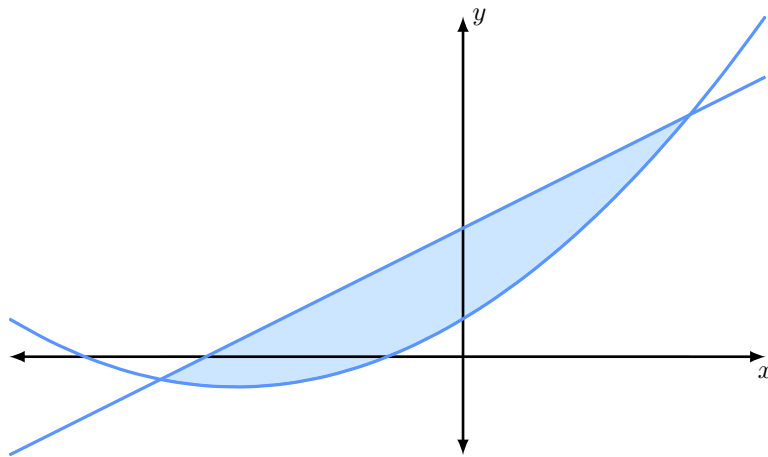
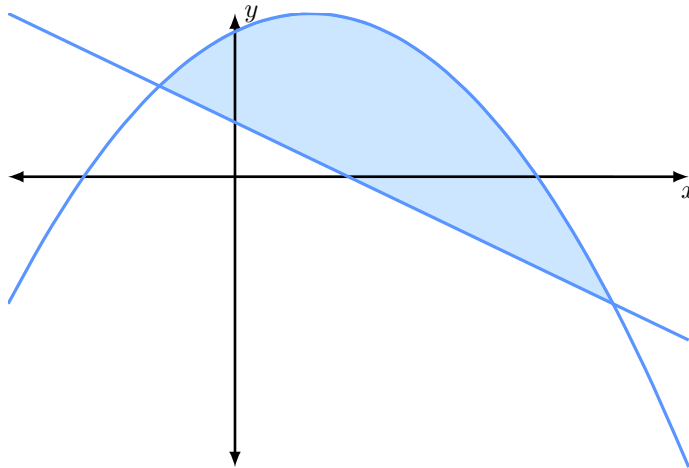


## Question Sheet

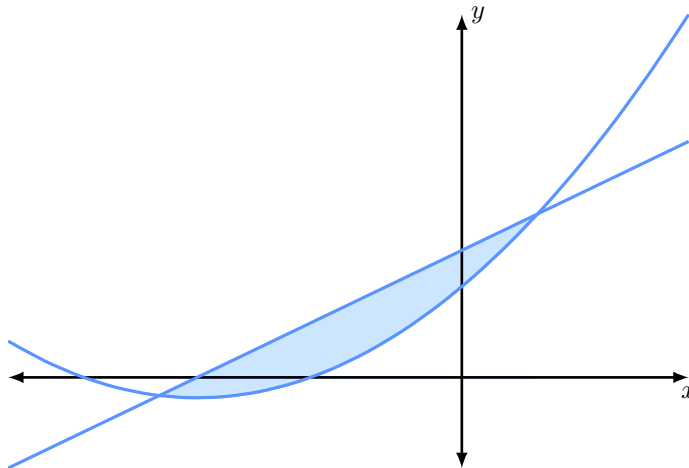
1. Compute the area between the curve  $y = (x + 3)(x - 3)$  and the  $x$ -axis, for  $-2 \leq x \leq 1$ .
2. Compute the area between the curve  $y = (x + 1)(x - 2)$  and the  $x$ -axis, for  $0 \leq x \leq 1$ .
3. Compute the area between the curve  $y = -(x + 4)(x + 1)$  and the  $x$ -axis, for  $-4 \leq x \leq -3$ .
4. Compute the area between the curve  $y = (x - 1)(x + 5)$  and the  $x$ -axis, for  $-3 \leq x \leq 1$ .
5. Compute the area between the curve  $y = (x + 2)(x - 5)$  and the  $x$ -axis, for  $-1 \leq x \leq 2$ .
6. Compute the area between the curve  $y = (x + 5)(x - 3)(x - 5)$  and the  $x$ -axis, for  $-2 \leq x \leq -1$ .
7. Compute the area between the curve  $y = -(x + 4)x(x - 3)$  and the  $x$ -axis, for  $-2 \leq x \leq 0$ .
8. Compute the area between the curve  $y = -(x + 1)(x - 1)(x - 3)$  and the  $x$ -axis, for  $-1 \leq x \leq 3$ .
9. Compute the area between the curve  $y = -(x + 2)(x - 3)(x - 5)$  and the  $x$ -axis, for  $-2 \leq x \leq 1$ .
10. Compute the area between the curve  $y = (x + 3)x(x - 4)$  and the  $x$ -axis, for  $-2 \leq x \leq 2$ .
11. Find the shaded area, which is bounded by the curve  $y = (x + 5)(x + 1)$  and the line  $y = 5x + 17$ .



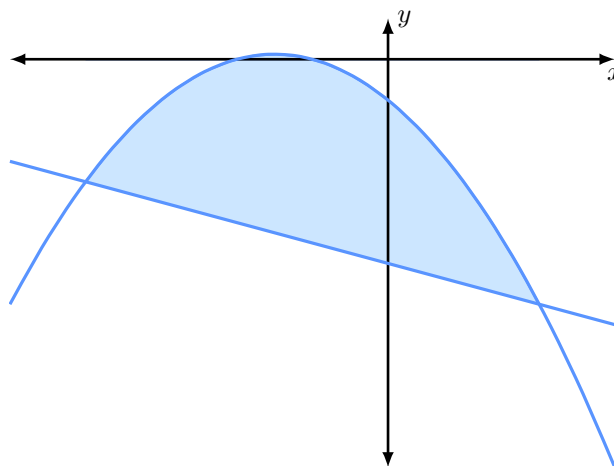
12. Find the shaded area, which is bounded by the curve  $y = -(x+2)(x-4)$  and the line  $y = -2x + 3$ .



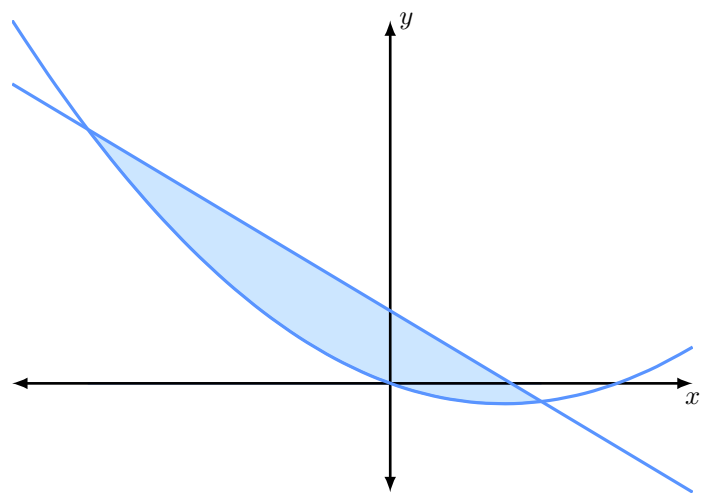
13. Find the shaded area, which is bounded by the curve  $y = (x+5)(x+2)$  and the line  $y = 4x + 14$ .



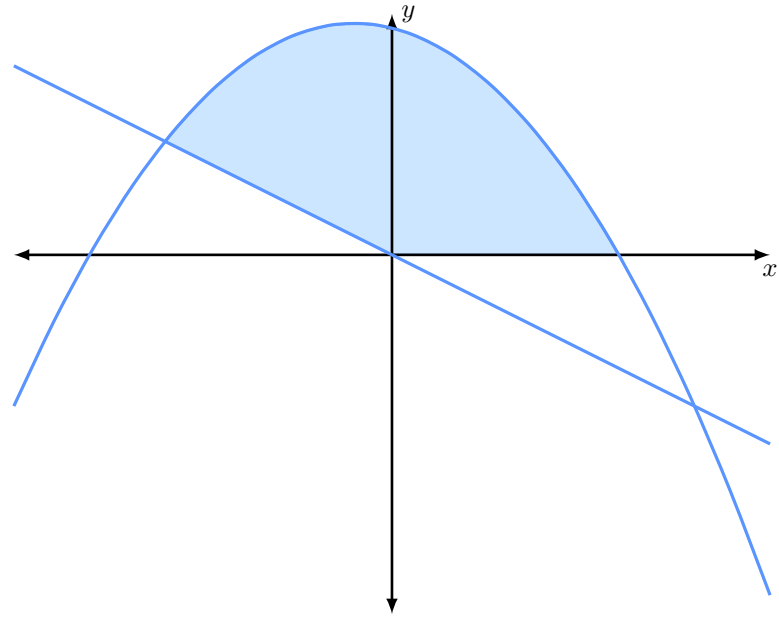
14. Find the shaded area, which is bounded by the curve  $y = -(x+2)(x+1)$  and the line  $y = -x - 10$ .



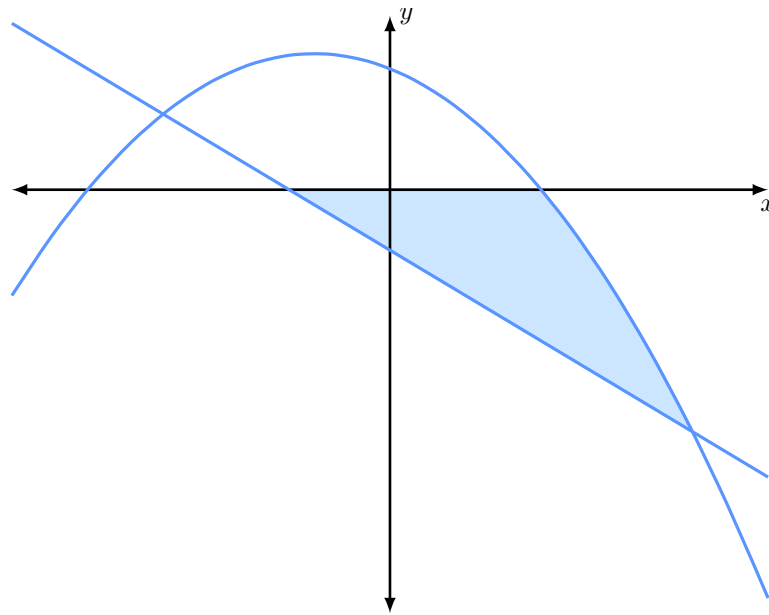
15. Find the shaded area, which is bounded by the curve  $y = x(x - 3)$  and the line  $y = -5x + 8$ .



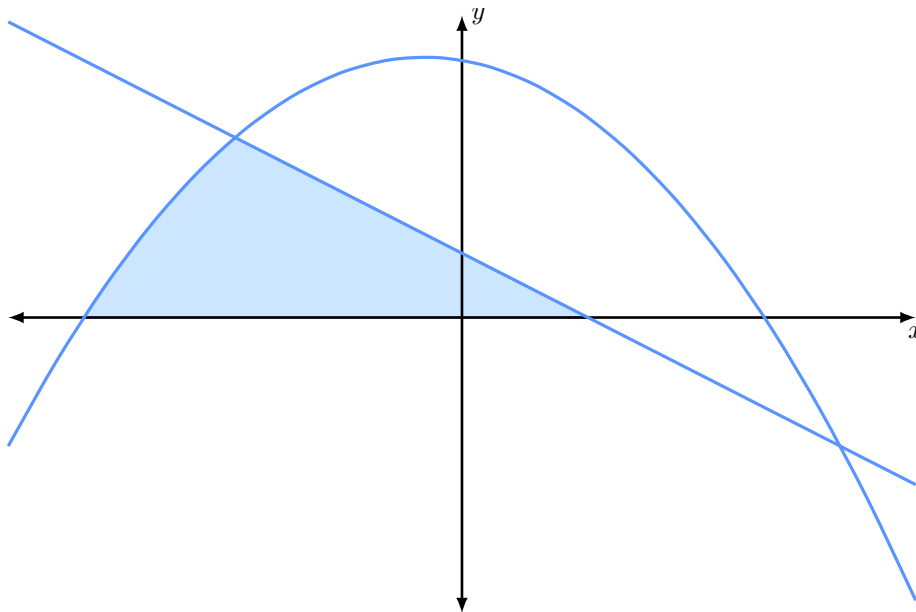
16. Calculate the shaded area. The curve has equation  $y = -(x + 4)(x - 3)$ , and the line has equation  $y = -2x$ .



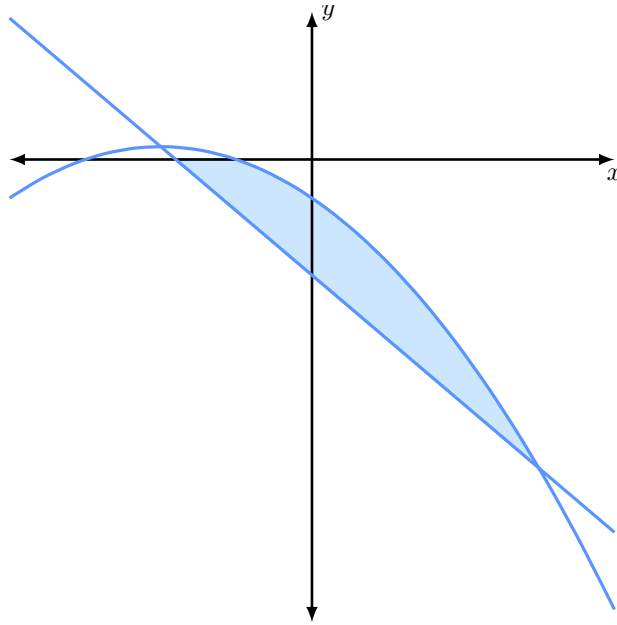
17. Calculate the shaded area. The curve has equation  $y = -(x+4)(x-2)$ , and the line has equation  $y = -3x-4$ .



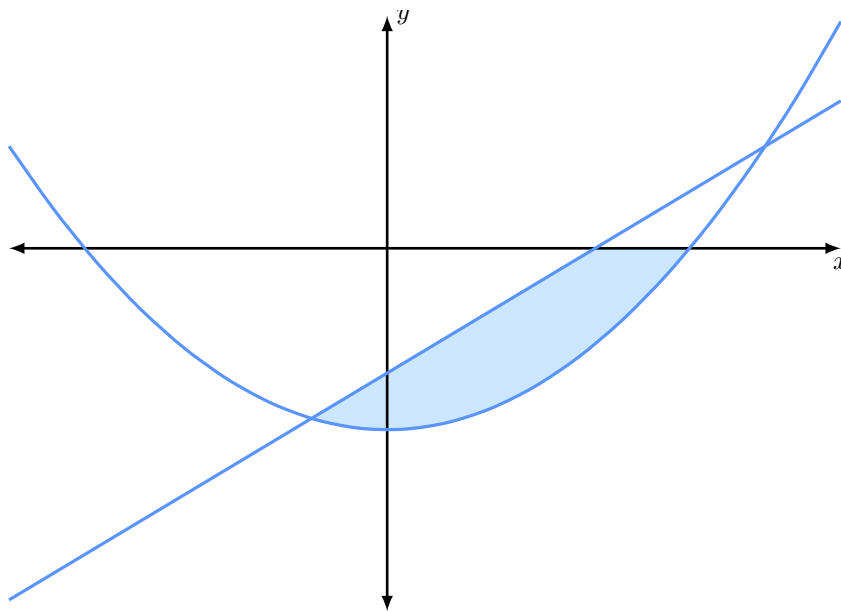
18. Calculate the shaded area. The curve has equation  $y = -(x+5)(x-4)$ , and the line has equation  $y = -3x+5$ .



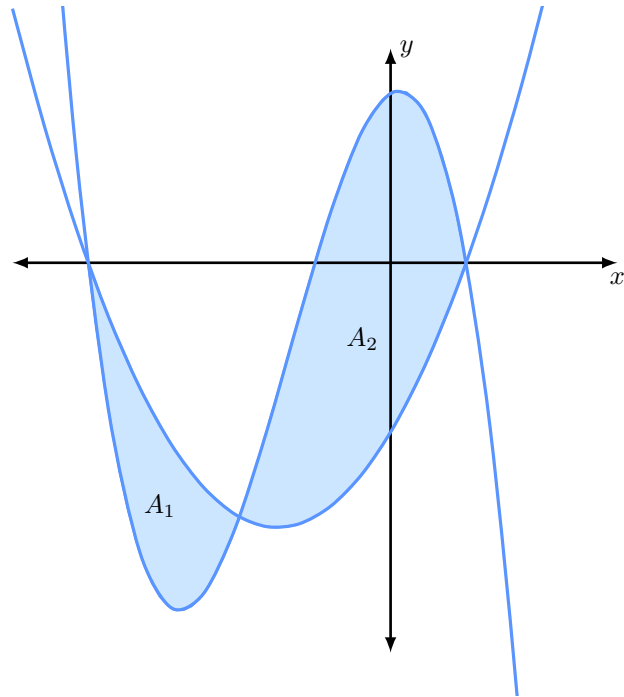
19. Calculate the shaded area. The curve has equation  $y = -(x+3)(x+1)$ , and the line has equation  $y = -5x-9$ .



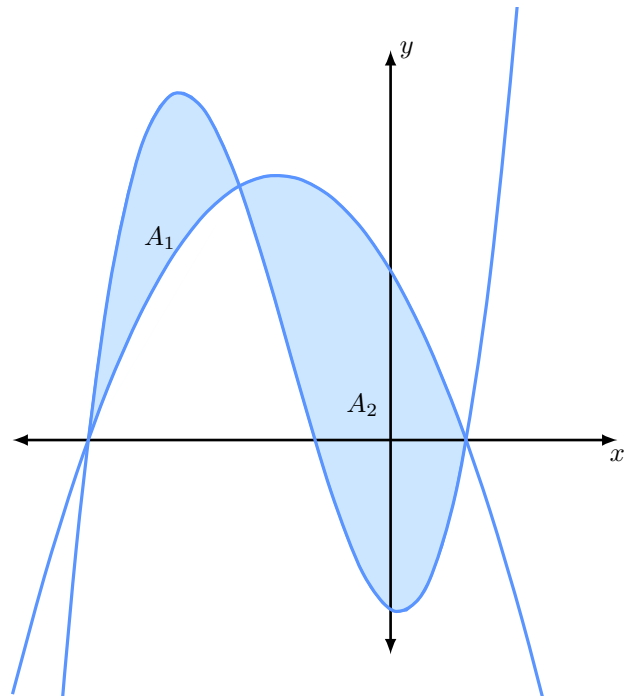
20. Calculate the shaded area. The curve has equation  $y = (x+4)(x-4)$ , and the line has equation  $y = -11+4x$ .



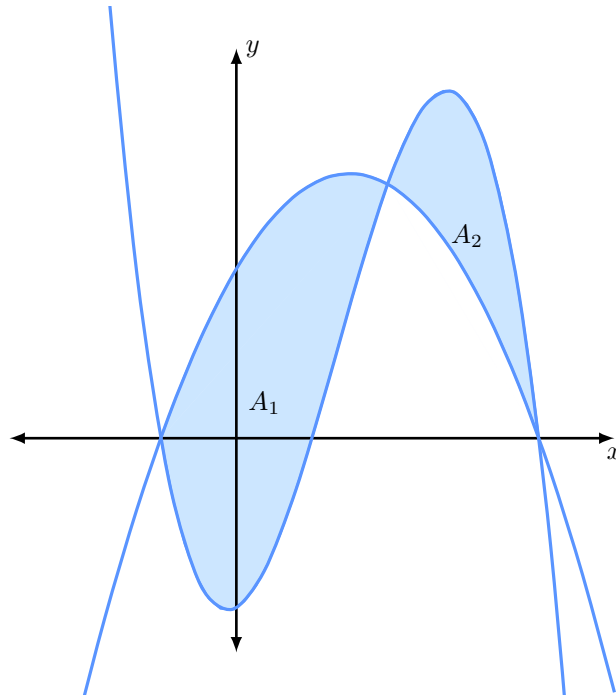
21. Find the shaded area, which is bounded by the curves with equations  $y = (x + 4)(x - 1)$  and  $y = -(x + 4)(x + 1)(x - 1)$ .



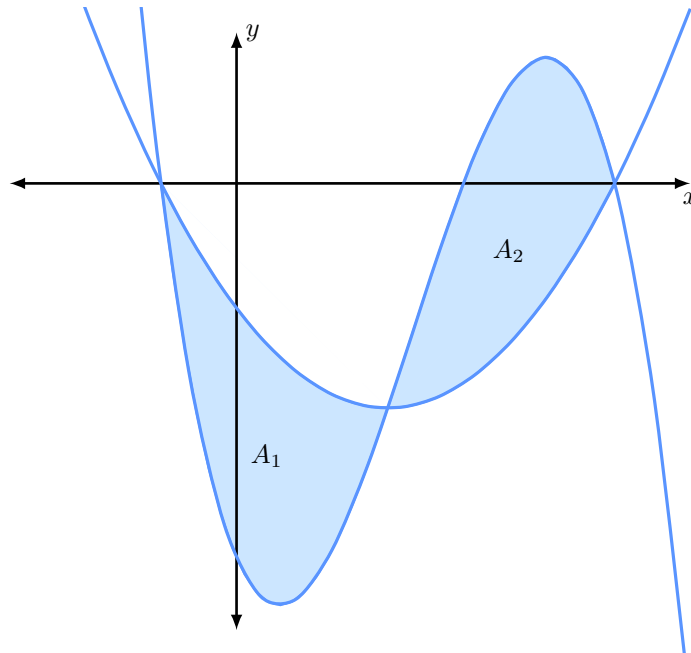
22. Find the shaded area, which is bounded by the curves with equations  $y = -(x + 4)(x - 1)$  and  $y = (x + 4)(x + 1)(x - 1)$ .



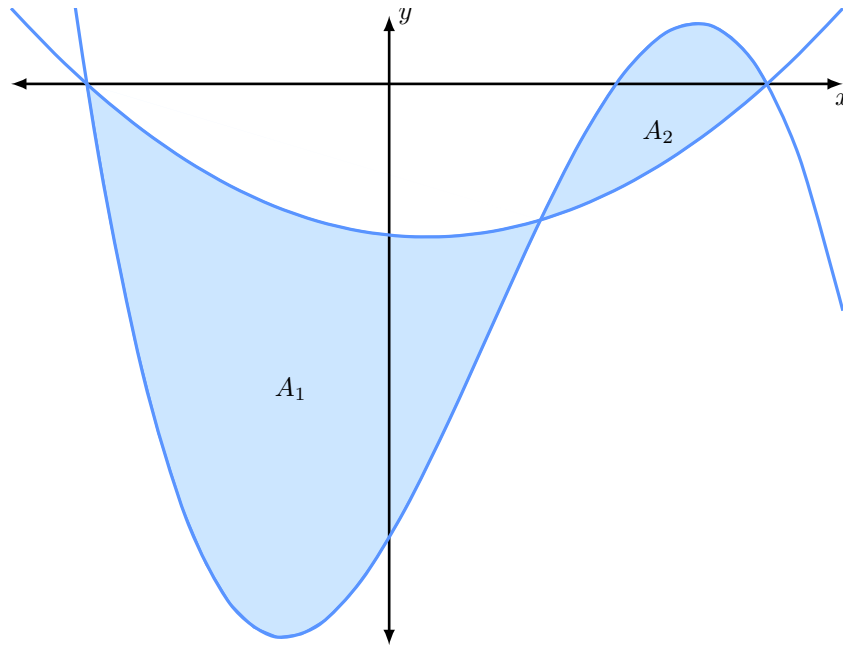
23. Find the shaded area, which is bounded by the curves with equations  $y = -(x + 1)(x - 4)$  and  $y = -(x + 1)(x - 1)(x - 4)$ .



24. Find the shaded area, which is bounded by the curves with equations  $y = (x + 1)(x - 5)$  and  $y = -(x + 1)(x - 3)(x - 5)$ .



25. Find the shaded area, which is bounded by the curves with equations  $y = (x + 4)(x - 5)$  and  $y = -(x + 4)(x - 3)(x - 5)$ .



26. Find the area bounded by the curve  $y = \frac{1}{2}x^2$ , and its normals at  $x = -1$  and  $x = 1$ .
27. Find the area bounded by the curve  $y = \frac{1}{2}x^2$ , and its normals at  $x = -2$  and  $x = 1$ .
28. Find the area bounded by the curve  $y = \frac{1}{4}x^2$ , and its normals at  $x = -2$  and  $x = 1$ .
29. Find the area bounded by the curve  $y = \frac{1}{4}x^2$ , and its normals at  $x = -1$  and  $x = 1$ .
30. Find the area bounded by the curve  $y = \frac{1}{3}x^2$ , and its normals at  $x = -3$  and  $x = 2$ .