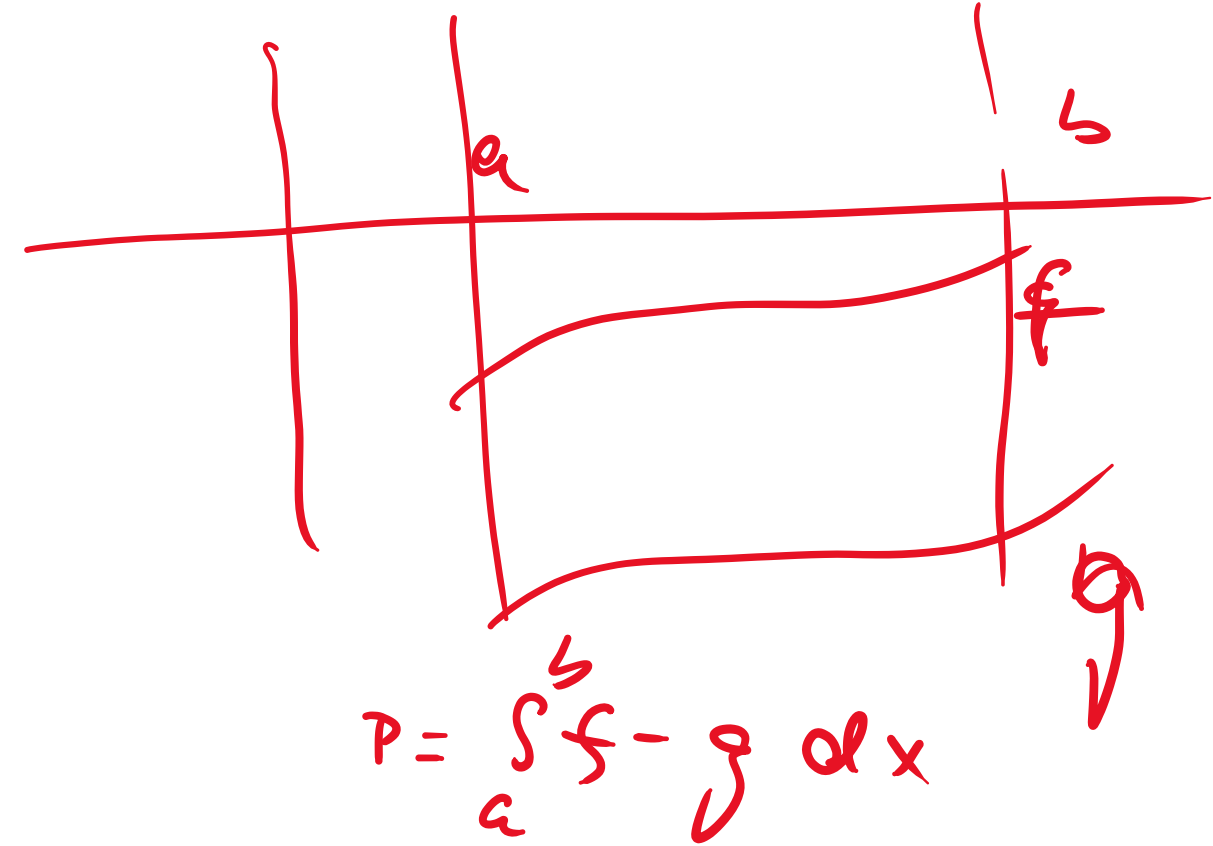
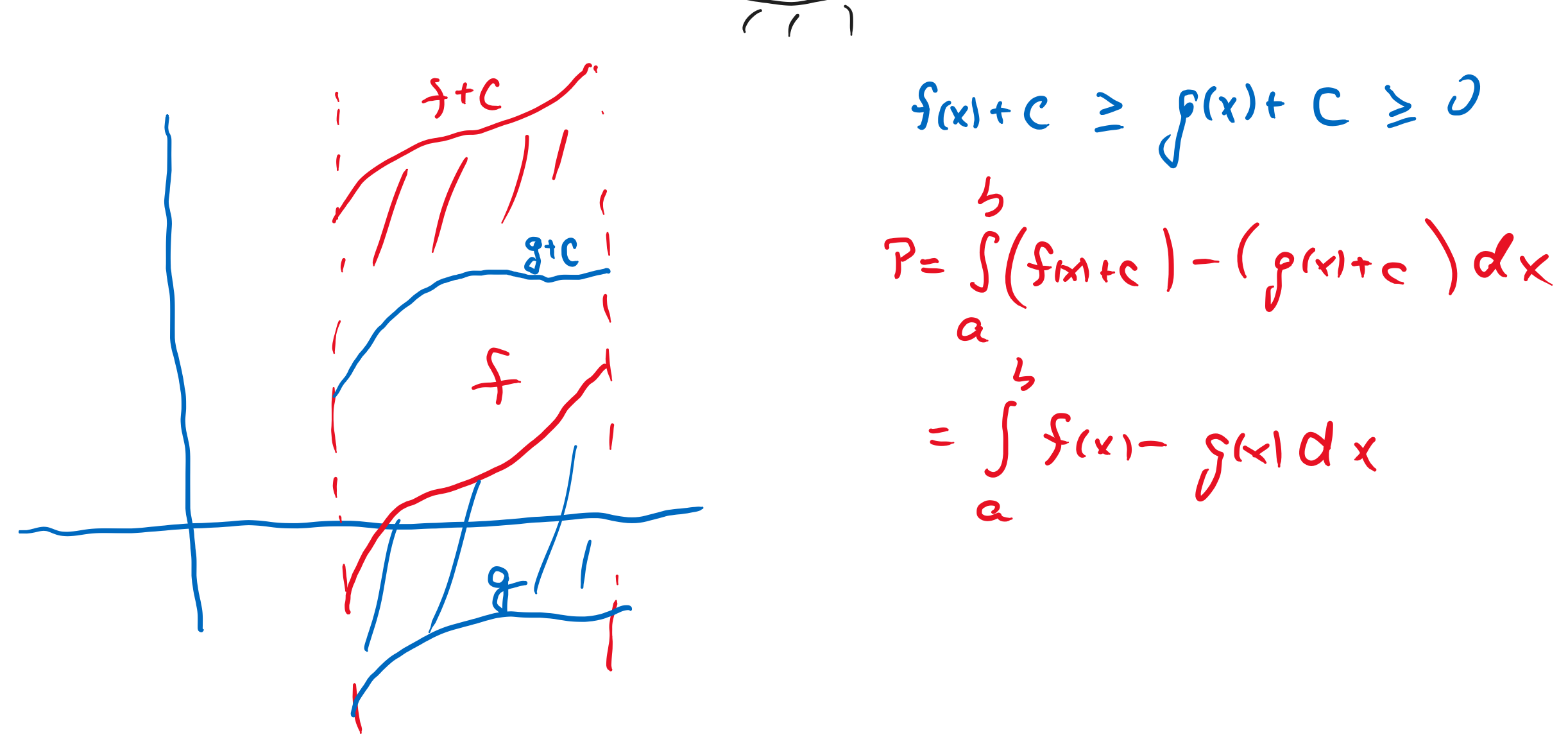
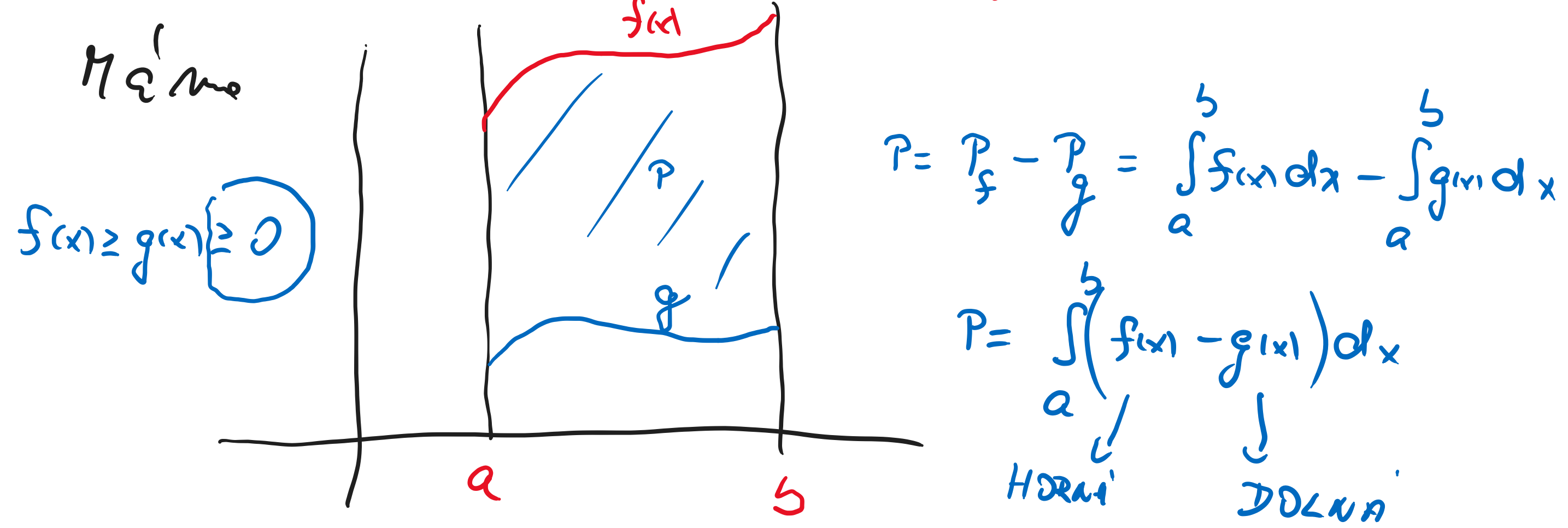
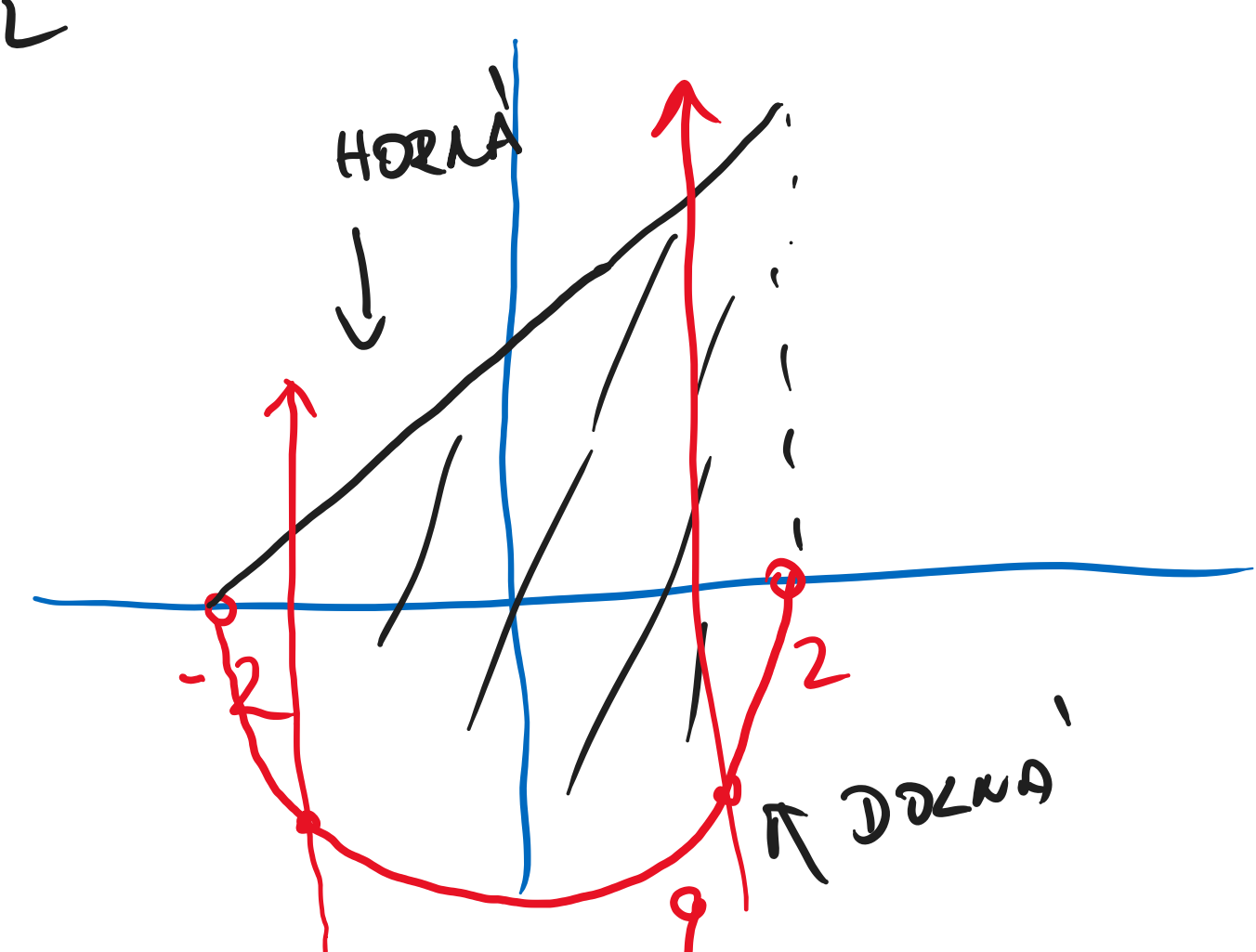


$$\int_0^{\pi/2} x \cdot \sin x \, dx = -x \cos x \Big|_0^{\pi/2} + \int_0^{\pi/2} \cos x \, dx$$

$v = 1 \quad u = -\cos x$ " $\sin x \Big|_0^{\pi/2} = 1$



Pr. $g(x) = 4 - x^2$
 $f = x + 2$



$$P = \int_{-2}^2 (x+2) - (4-x^2) \, dx = \int_{-2}^2 x^2 + x - 2 \, dx = \left. \frac{x^3}{3} + \frac{x^2}{2} - 2x \right|_{-2}^2 = \dots$$

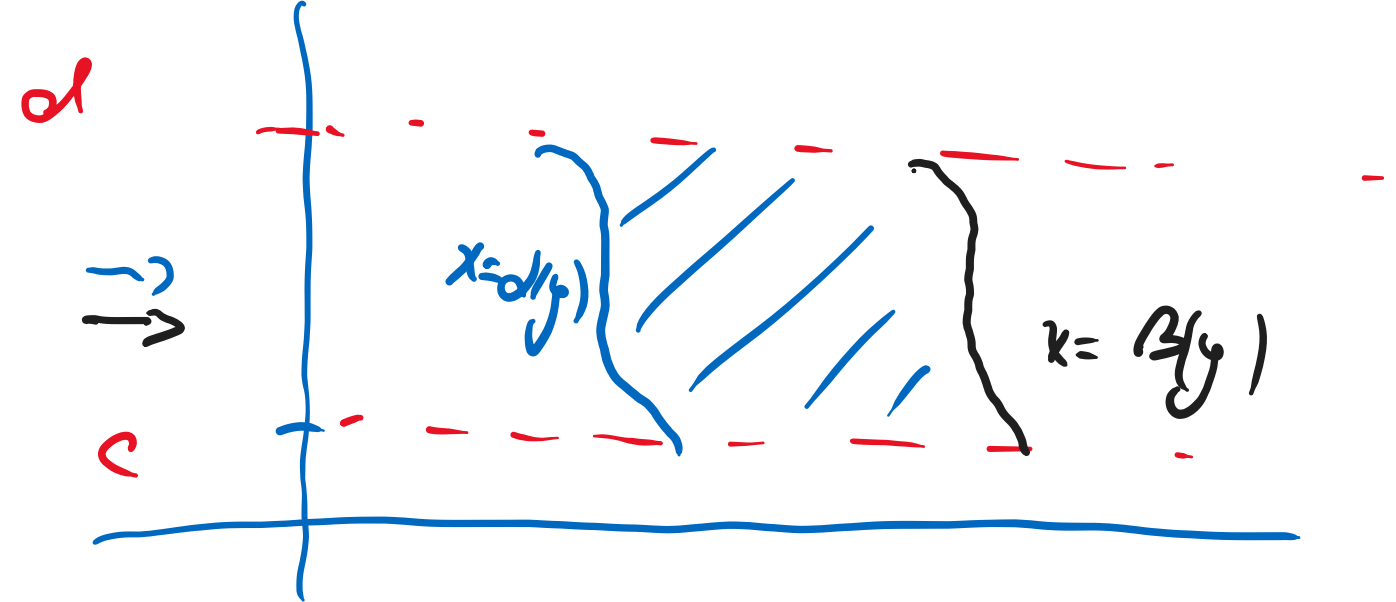
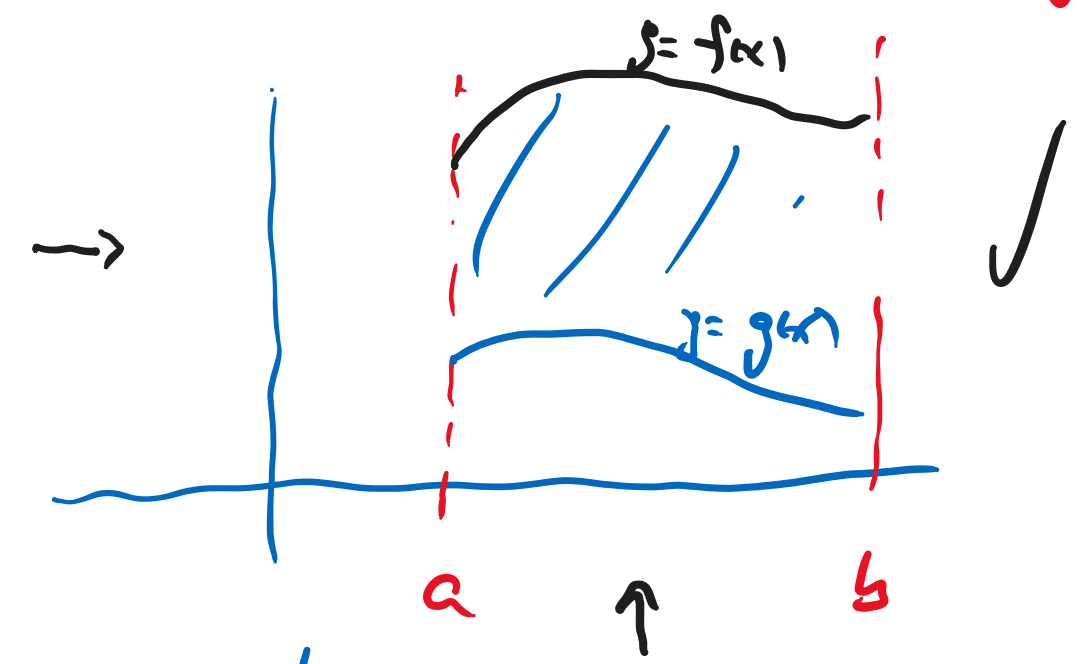
ELEMENTARNA D BLAGOST

TIP [x, y]

TIP [y, x]

$A = \{ [x, y] ; a \leq x \leq b ; g(x) \leq y \leq f(x) \}$

$A = \{ [y, x] ; c \leq y \leq d ; a(y) \leq x \leq b(y) \}$

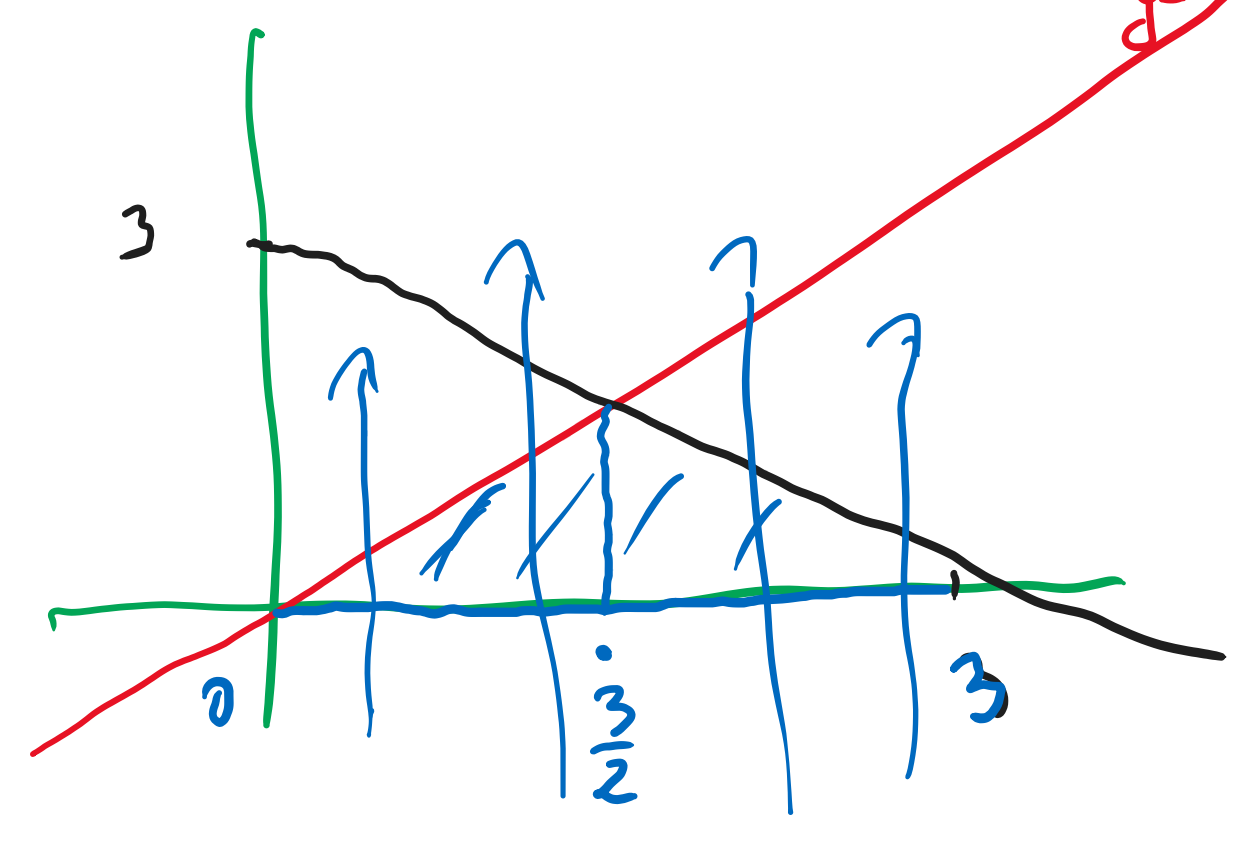


$P(A) = \int_a^b (f(x) - g(x)) \, dx$

$P(A) = \int_c^d (b(y) - a(y)) \, dy$

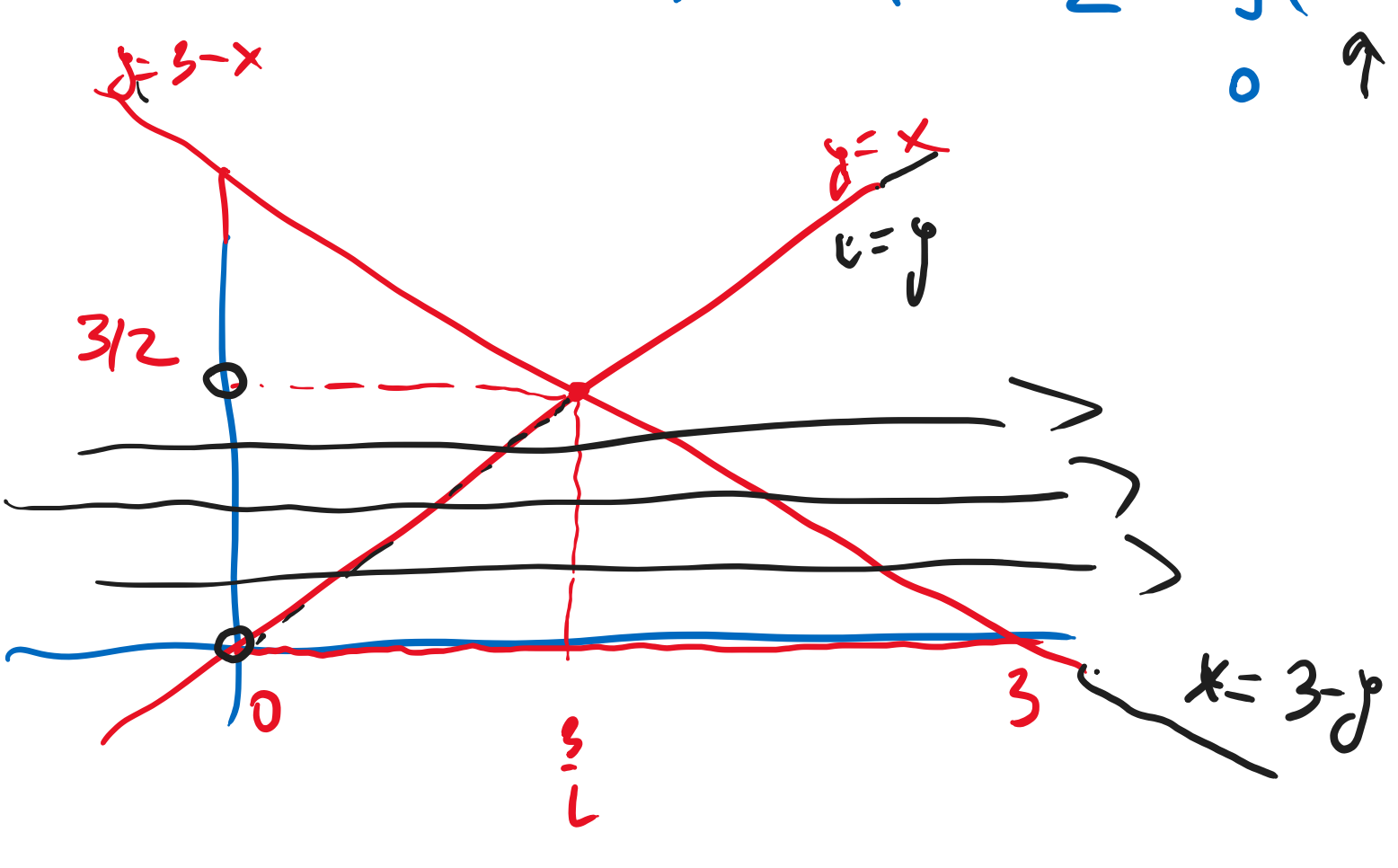
Pr. $P = ? \quad y = x \quad y = 3 - x \quad y = 0$

$y + x = 3$
 $\frac{x}{3} + \frac{y}{3} = 1$



[x, y]
 dolna granica os x
 horna granice najpr $y = x$
 pota $y = 3 - x$

$\checkmark P = P_1 + P_2 = \int_0^{3/2} (x-0) \, dx + \int_{3/2}^3 (3-x) \, dx = \dots$



[y, x]

$D = y \in \left[\frac{3}{2}, 3 \right]$
 $P = \int_{3/2}^3 (3-y) - (y) \, dy$

dolna i horna granica na y osi.