



$$f_x(x) = \frac{1}{2} \quad 0 \leq x \leq 2$$

ZALOGA VREDNOSTI Y:

$$0 \leq y \leq 1$$

$$F_Y(y) = P(Y \leq y) = P[g(x) \leq y] = \int_{g(x) \leq y} f_x(x) dx = \int_0^a \frac{1}{2} dx + \int_b^2 \frac{1}{2} dx$$

$$a = y$$

$$b = 2 - y$$

$$F_Y(y) = \int_0^y \frac{1}{2} dx + \int_{2-y}^2 \frac{1}{2} dx = \frac{x}{2} \Big|_0^y + \frac{x}{2} \Big|_{2-y}^2 = \frac{y}{2} + \frac{2}{2} - \frac{2-y}{2} = y$$

$$\underline{\underline{F_Y(y) = y}} \quad \underline{\underline{0 \leq y \leq 1}}$$

$$\underline{\underline{f_Y(y) = 1}} \quad \underline{\underline{0 \leq y \leq 1}}$$