$Y_i \sim Ber(p_i)$ $\quad p_i \in [0,1]$

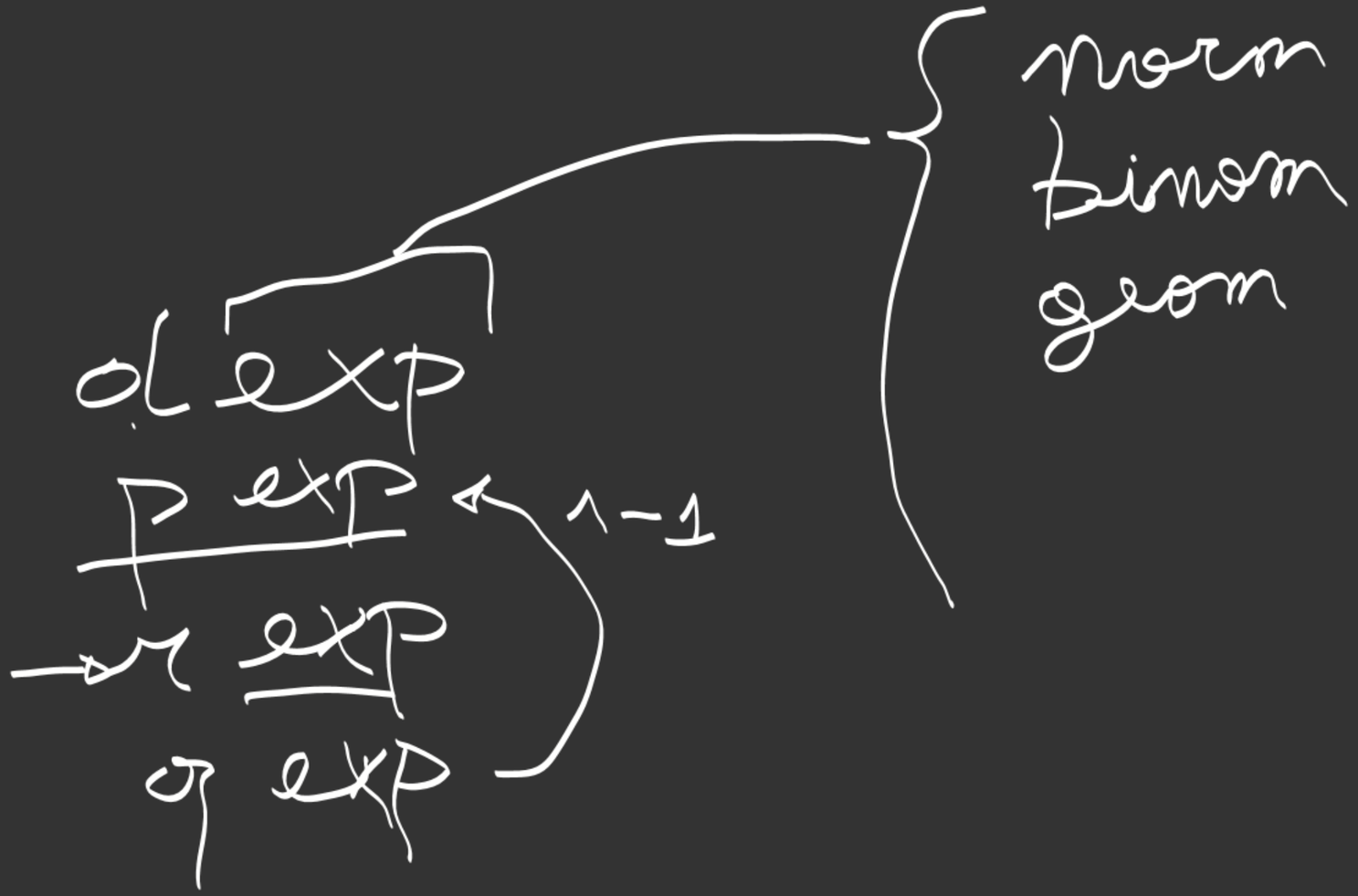
$x_i \xrightarrow{?} p_i$

$p_i = \alpha + \beta x_i : \quad p_i \in [0,1]$

$$Y \mid X_1, X_2, \ldots, X_p \sim f(\theta)$$

$$E[Y \mid \ldots] = g(\theta)$$

$$g(p_i) = \hat{\lambda} + \hat{\beta} x_i \longrightarrow p = 0.5$$


norm
binom
geom
α exp
p exp
1-1
exp
q exp

TASK:

DLM: $DUR \sim TEMP + AGE$

2) GLM $\quad DUR == 0$

3) USE MODEL 2) TO PREDICT

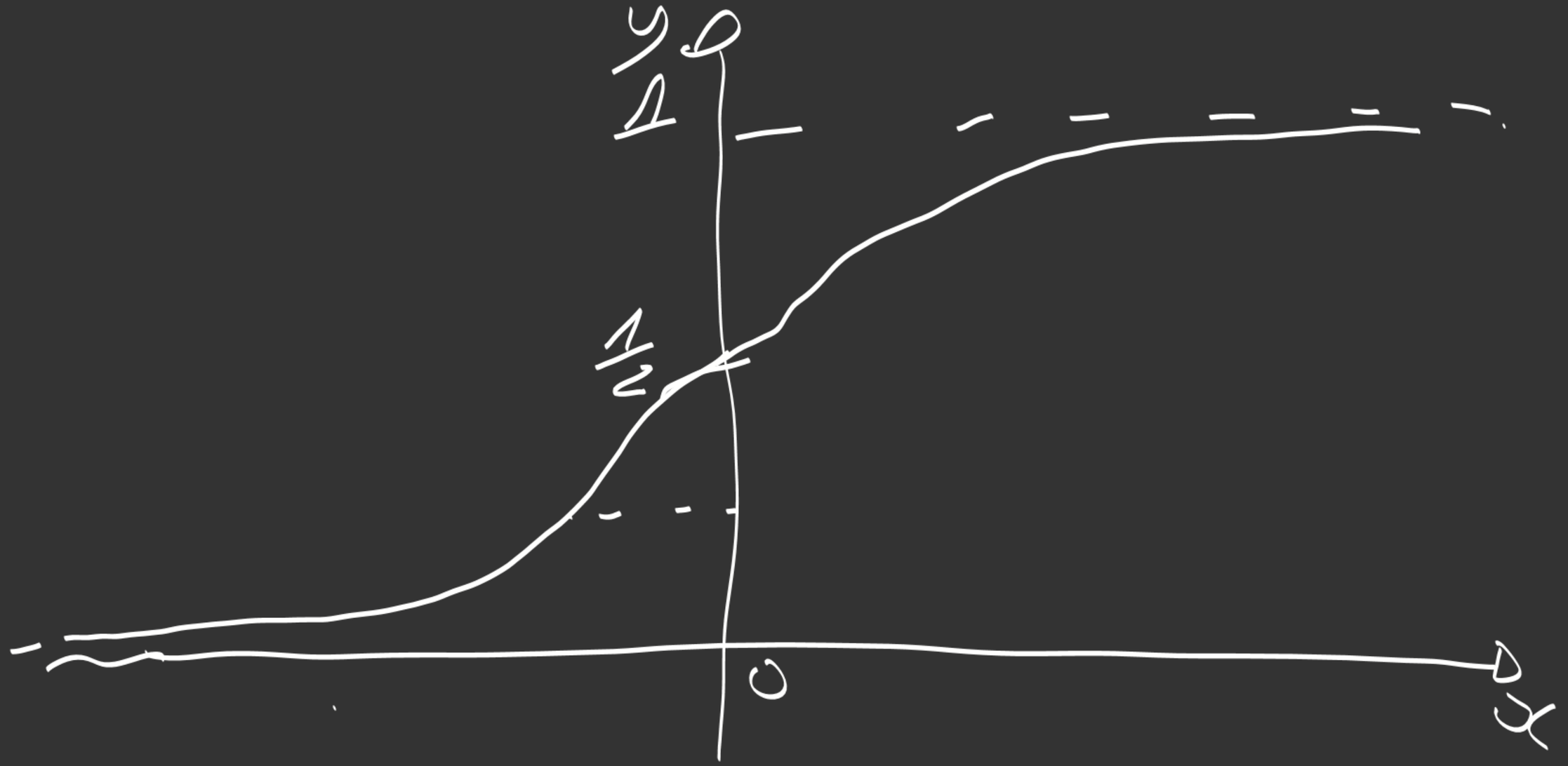
$P(Y > 0 \mid TEMP = 38, AGE = 45)$

TOMORROW

10:00 AM.

$$\ln\left(\frac{p_i}{1-p_i}\right) = -2.71 + 7\,\text{TEMP} + 0.07\,\text{AGE}$$

$$p_i = \frac{\exp(\ldots)}{1+\exp(\ldots)}$$


y
1
1/2
0
x