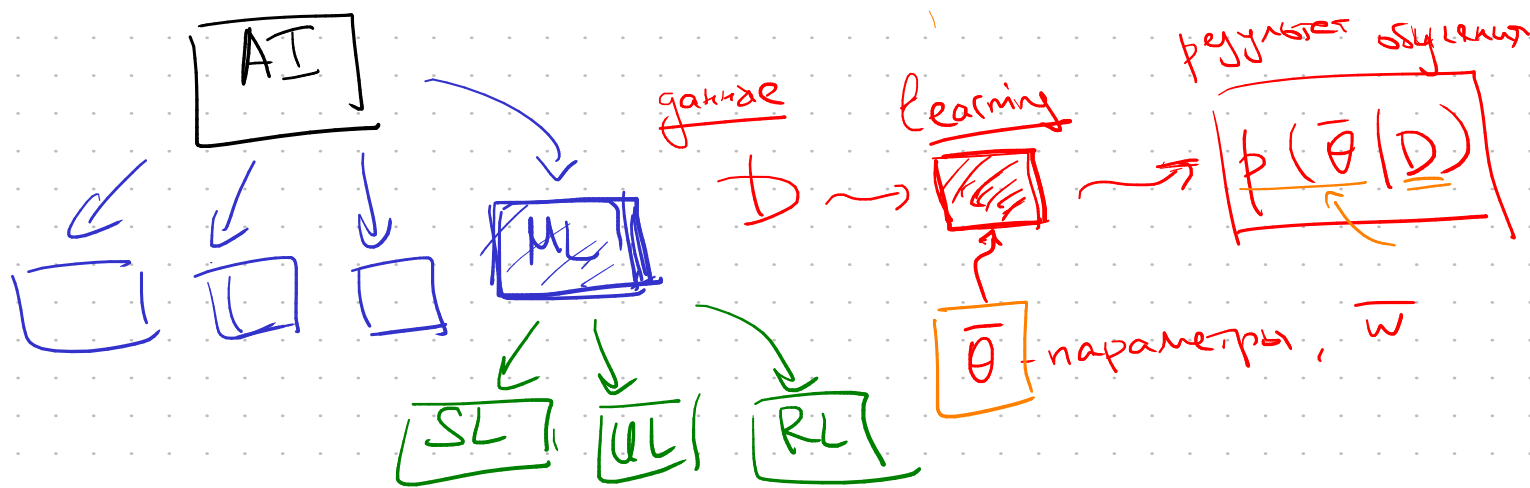
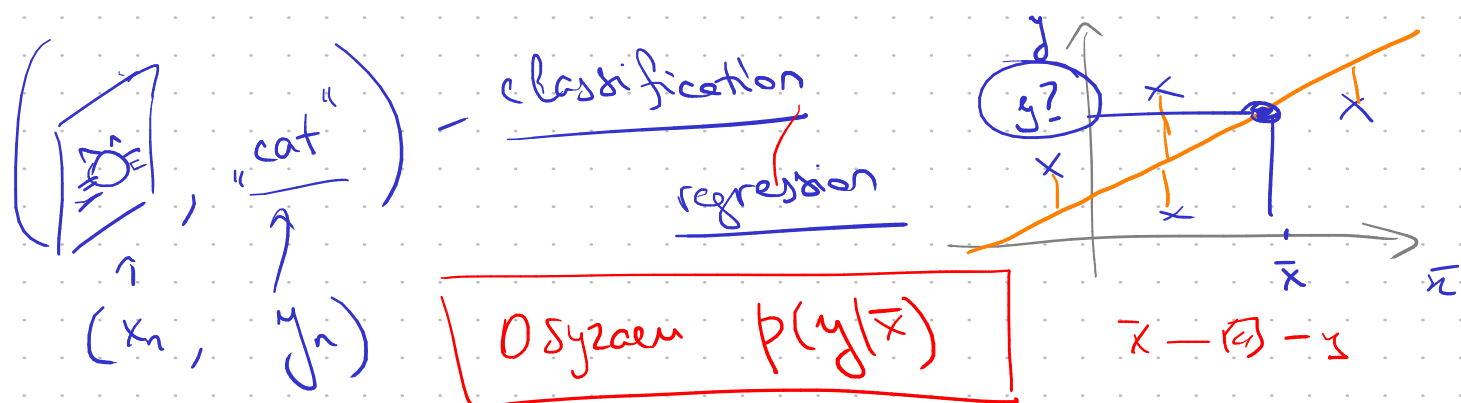
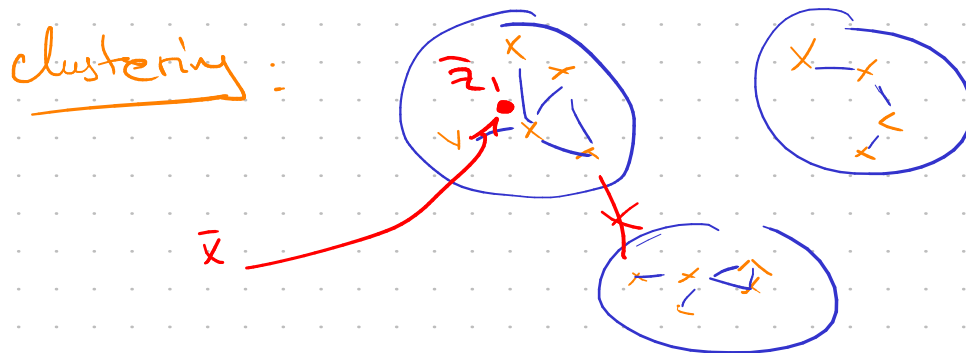
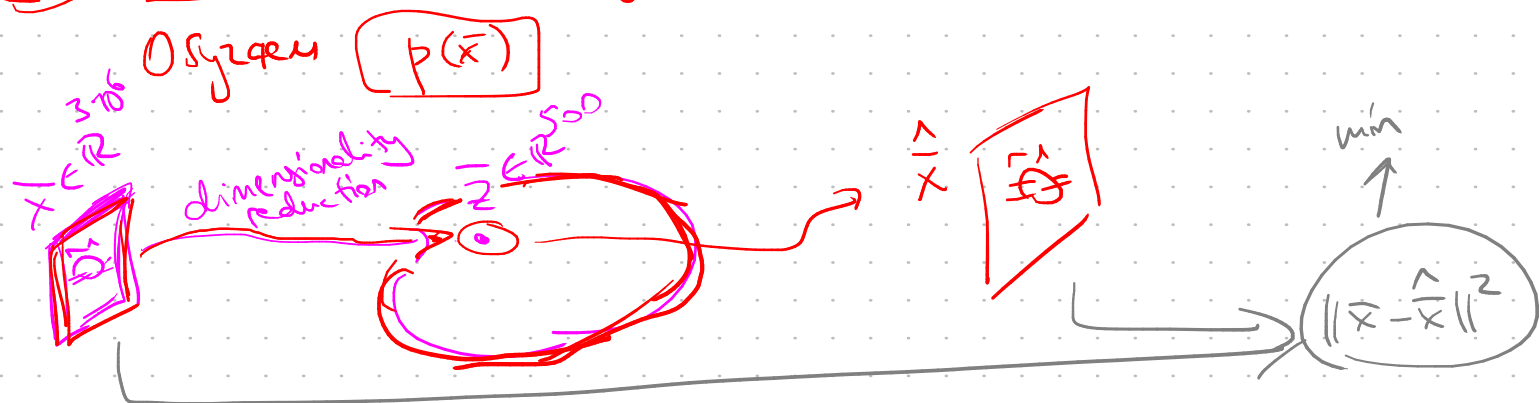




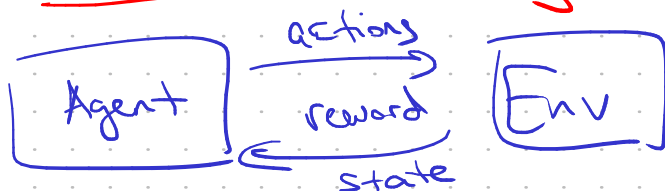
① Supervised learning $D = \{(\bar{x}_n, y_n)\}_{n=1}^N$



② Unsupervised learning $D = \{\bar{x}_n\}_{n=1}^N$



③ Reinforcement learning



$$p(\bar{\theta} | D) = \frac{p(D | \bar{\theta}) p(\bar{\theta})}{p(D)}$$

The diagram illustrates the components of Bayes' theorem for parameter estimation:

- likelihood**: $p(D | \bar{\theta})$
- prior distribution**: $p(\bar{\theta})$
- posterior distribution**: $p(\bar{\theta} | D)$
- max**: The maximum value of the posterior distribution is indicated by a pink arrow pointing to $\bar{\theta}$.
- Bayes' theorem**: The entire equation is labeled as such in blue.

To the right, the formula is repeated with additional labels:

Bayes' theorem: $\frac{p(D | \bar{\theta})}{p(D)}$

The denominator $p(D)$ is labeled as **gatto** in blue.