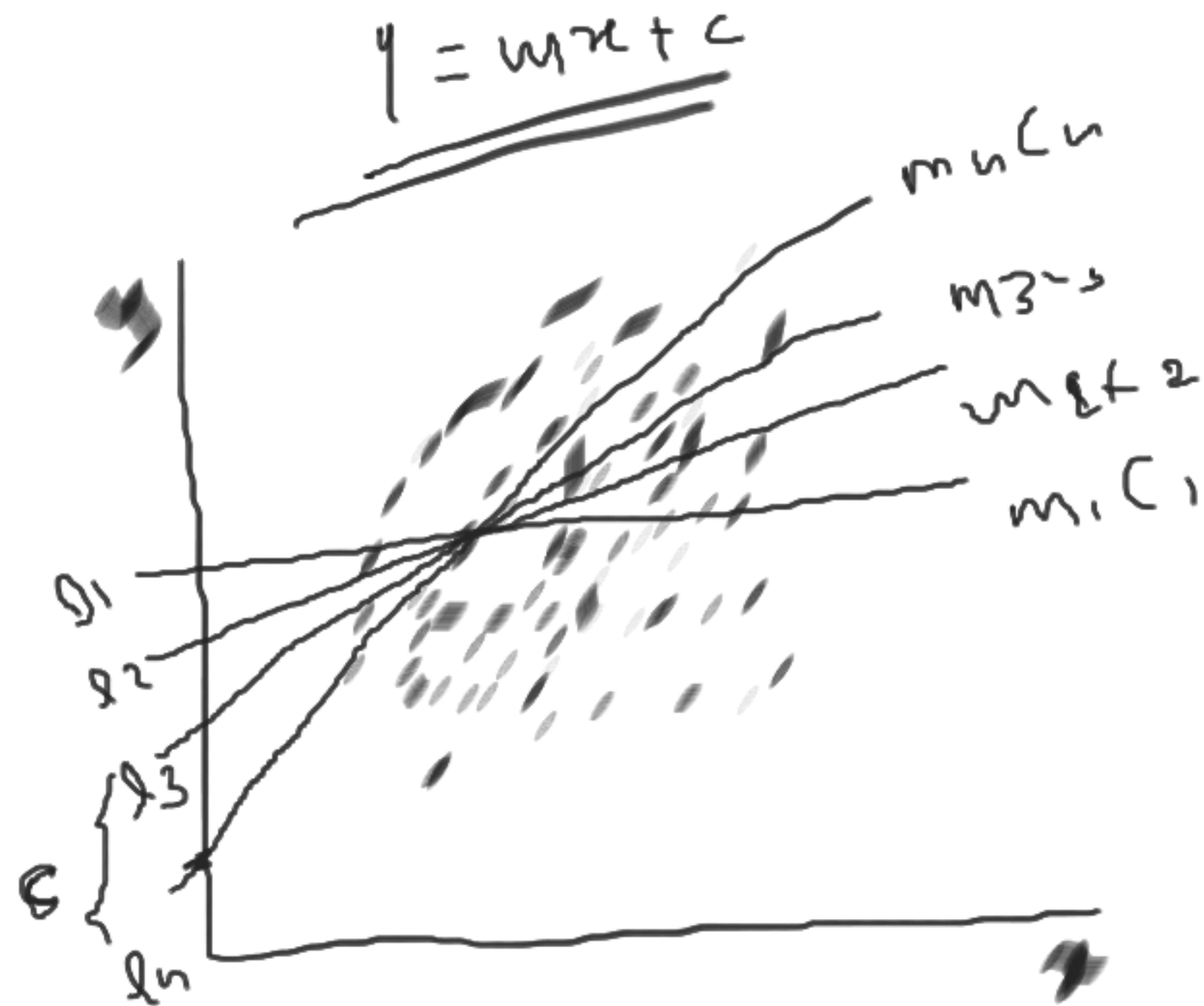


error / residual

3 ems 280
250

150



$m \neq c$

x_1	m_1	c_1	$\in L$
x_2	m_2	c_2	$\in L$
\vdots	\vdots	\vdots	\vdots
x_n	m_n	c_n	$\in L$

$\forall x \in L$

$$= \sum_{i=1}^n \frac{(y_i - \bar{y})^2}{n}$$

= Sum of squared error

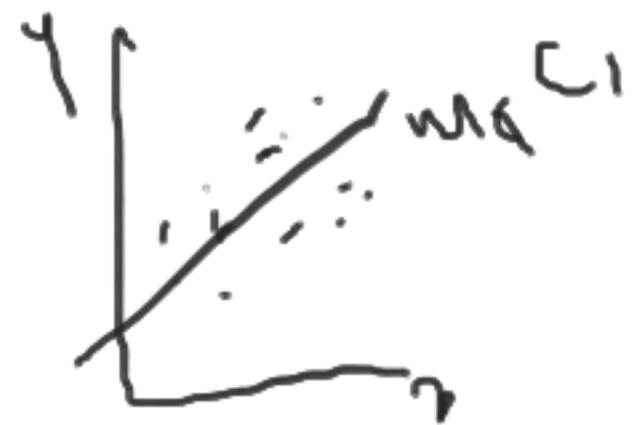
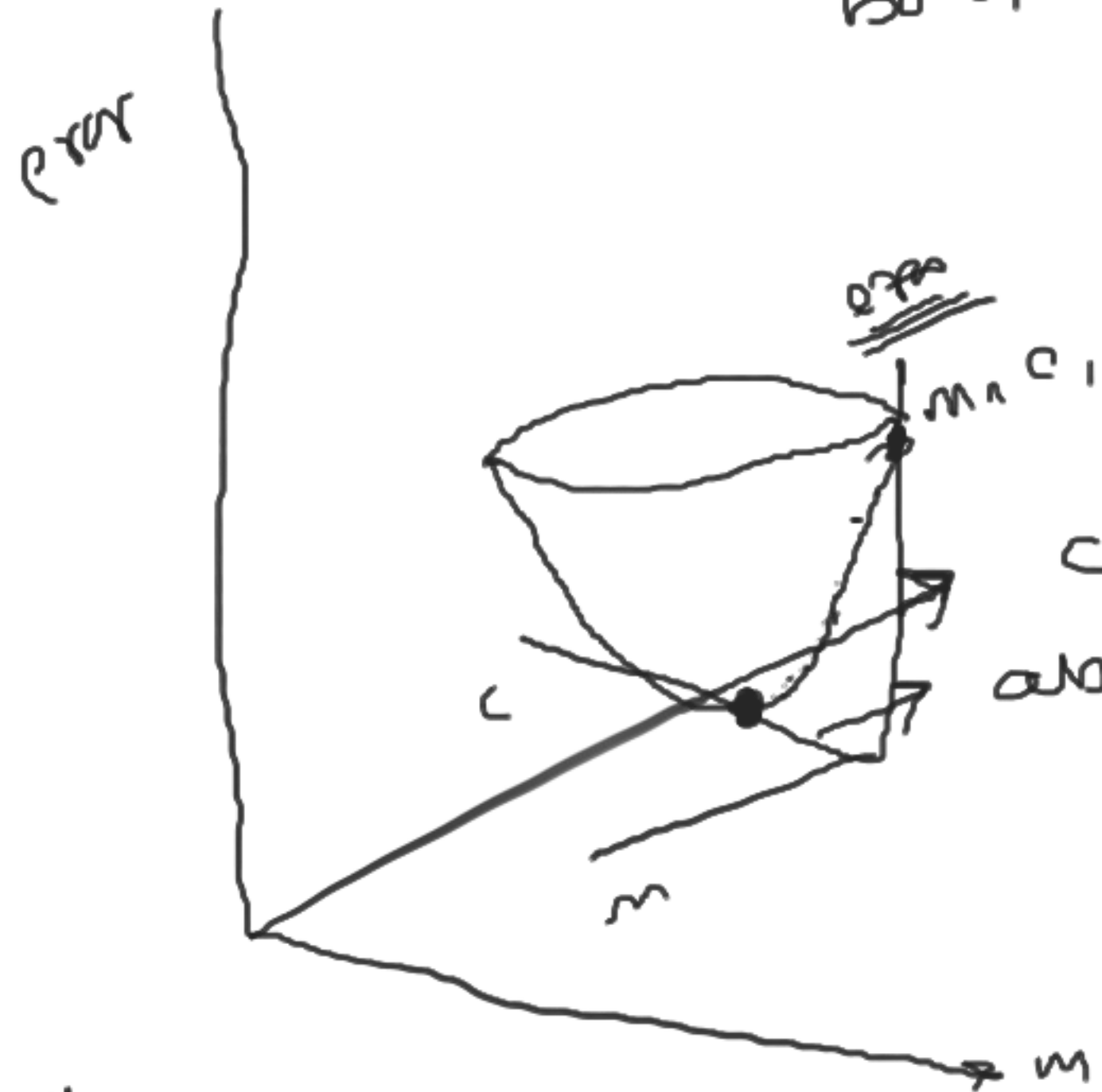
SSE



error = variance \equiv

Central value / model more reliable

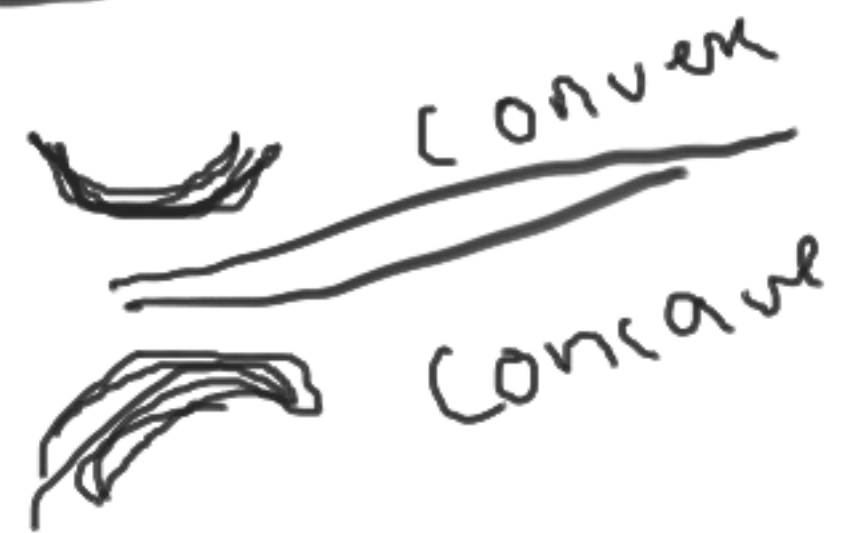
When mdc against error
bowl



$$E(y_q - y_p)^2$$

quadratic equations

Convex functions.



$\nabla \rightarrow$ Gradient descent

Partial derivative

$$\frac{dy}{dx}$$

