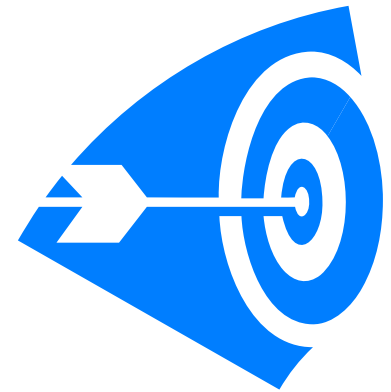


# LECTURE



# Logarithm and Standard Form

## ❖ Logarithm

Express indices form into logarithms form.

Example:  $a^x = y \Rightarrow \log_a y = x$

Identities on logarithm:

$$\log xy = \log x + \log y, \log \frac{x}{y} = \log x - \log y$$

$$\log x^n = n \log x, \log_a x = \frac{1}{\log_x a}$$

# Logarithm and Standard Form

## Standard Form

Introduce standard form:

$a \times 10^n$   
where  $-10 < a < 10$ ,  $n$  is an integer.

Convert a number to standard form:

$$12325.69 = 1.23 \times 10^3$$

