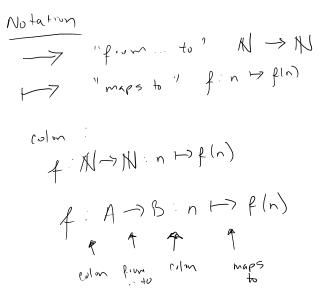
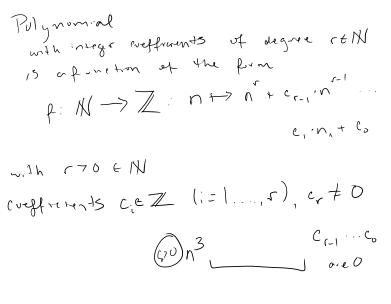
$$P \in \mathfrak{S}(g)$$





$$f,g: \mathbb{N} \to \mathbb{Z}$$
, we can say that $f \in O(g)$ if $|f| \in O(|g|)$

Absolute Valve

[M] = 3 - n re n 20

if n = 0

re n 70

$$p(n) = n^2 + 2n + 5$$
 $g(n) = -n^2 = -(n^2)$

Thus $g \in O(4)$

 $|g|: n \mapsto n^2$ |f| = f $|g| \in O(|f|)$

$$f(n) = n^2 + 2n + 5$$
 $5(n) = -(n^2)$
 $5how that $f(0)$
 $1f(0) = 0$$

ex,

|f| = f $|g| : n \mapsto n^2$ $|g| : n \mapsto n^2$

$$f,g:\mathbb{N}\to\mathbb{R}$$
 $f\in O(g)$
 $\downarrow fJ\in O(lg)$
 $\downarrow fJ\in O(lg)$
 $\downarrow fJ\in O(lg)$
 $\downarrow fJ\in O(lg)$

1.21 = 0 + 7/

$$log_{\alpha}(n) \in O log_{b}(n) \quad for \quad all$$

$$log_{\alpha}(n) = \frac{log_{b}(n)}{log_{b}(n)}$$

$$log_{\alpha}(n) = \frac{log_{b}(n)}{log_{\alpha}(n)}$$

$$log_{\alpha}(n) = log_{b}(n) \left(log_{\alpha}(n) + log_{\alpha}(n)\right)$$

$$log_{\alpha}(n) = log_{b}(n) \left(log_{\alpha}(n) + log_{\alpha}(n)\right)$$