

Use the following spaces to record any information about key topics that you find useful.
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⇒ Learning outcomes:

⇒ Why do we care about the growth of functions?

⇒ Definition of  $O$  expressed as a quantified statement:

Rules for choosing  $c$  and  $n_0$  to show  $f = O(n^k)$  when  $f(n)$  is a polynomial function of degree  $k$ :

Intuitively,  $O$ , describes what relationship between functions  $f$  and  $g$ , if  $f = O(g)$ ?

$\Rightarrow$  Definition of  $\Omega$  expressed as a quantified statement:

Rules for choosing  $c$  and  $n_0$ :

Intuitively,  $\Omega$ , describes what relationship between functions  $f$  and  $g$ , if  $f = \Omega(g)$ ?

$\Rightarrow$  Definition of  $\Theta$  expressed in terms of  $O$  and  $\Theta$ :

$\Rightarrow$  Common functions in algorithmic complexity: