

Attendance Lecture 9.

Hexin Bi

$$\text{II } 3 + \sqrt{3 + \frac{1}{3 + \sqrt{3 + \frac{1}{\dots}}}}$$

$$\# \{3, 3, 3, \dots\}$$

$$x = 3 + \sqrt{3}$$

$$x^2 = 3x + 1$$

$$x^2 - 3x - 1 = 0$$

$$x = 3 + \frac{\sqrt{13}}{2}$$

The number is irrational

$x$  is larger than 3,  $3 + \frac{\sqrt{13}}{2}$  is true

