

Chris Hayduk
Lecture 20, Ex. B

11/17

1. $I = (a), a \in I$

$$\Rightarrow a \in I_N \text{ for some } N$$

$$\Rightarrow a \in I_k, \quad \forall k \geq N$$

$$\Rightarrow I = (a) \subseteq I_k \subseteq I$$

$$\Rightarrow I_k = I = I_N \quad \forall k \geq N$$

2a.