

**Source:**

## 1 | **Axler 3.A source**

## 2 | **invariant subspace def**

Suppose  $T \in \mathcal{L}(V)$ . A subspace  $U$  of  $V$  is called *invariant* under  $T$  if  $u \in U$  implies  $Tu \in U$ .

### 2.1 | **intuit**

A subspace  $U$  is called invariant on  $T$  if  $T|_U$