



Math for the people, by the people.

## stationary point

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Suppose  $V$  is a vector space and  $L: V \rightarrow \mathbb{R}$  is a map. Then  $v \in V$  is a *stationary point* of  $L$  provided that

$$\left. \frac{d}{dt} L(v + tu) \right|_{t=0} = 0$$

for all  $u \in V$ . In this case  $u$  is called a variation of  $v$ .