

3:49
4

...
N M L K H A

CKHL ...

$$180^\circ = \angle BCA + \angle KHL$$

$$\angle BCA = \angle LHA \iff 180^\circ = \angle KHL + \angle LHA$$

(AB) $\angle ADB = \angle BCA$

(L) $\angle BCA = \angle LHA$

(M) $\angle LHA = \angle AML$

$$90 - \alpha = \angle DAB \leftarrow \angle ADB = \alpha$$

(L) $\angle AML = \alpha$

$\triangle MNA$:

$$180 = \angle NMA + \angle ANM + \angle NAM$$

$$180 = \alpha + \angle ANM + 90 - \alpha$$

$$\boxed{\angle ANM = 90^\circ}$$