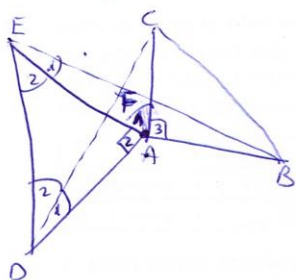


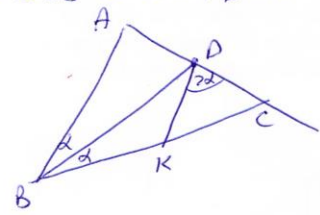
0.25
1



$\angle A_1 + \angle A_2 = \angle A_1 + \angle A_3$ I-1
 $CA = AB$
 $AD = EA$
 \Downarrow
 (B.S) $\triangle EAB \cong \triangle DAC$
 \Downarrow
 $BE = CD$

$\angle E_1 = \alpha \Leftrightarrow \angle D_1 = \alpha$ (no) II
 $45^\circ = \angle D_{(12)} = \angle E_2$

$BE \perp CD \Leftrightarrow \angle EFD = 90^\circ \Leftrightarrow \angle E_1 + \angle E_2 = 45 + \alpha$: $\triangle EFD$
 $\angle D_2 = 45 - \alpha$



$\frac{AB}{BC} = \frac{AD}{DC}$
 (S.S) $\triangle ABC \sim \triangle KDC$
 $\frac{AB}{BC} = \frac{KD}{DC}$: \triangle $\frac{AB}{BC} = \frac{KD}{DC}$ on 1
 $AD = KD \Leftrightarrow$