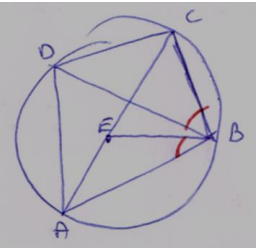


1.105
6



$\triangle ABC \sim \triangle ABE \leftarrow \begin{matrix} \angle BAC = \angle BAE \\ \angle BCA = \angle BEA \end{matrix} \quad \angle EBA = \angle EDC$ (S.S) $\angle BDC = \angle EAB$ (C)

$\angle EBA + \angle EBD = \angle EDC + \angle EBD$ (2)

$\triangle ECB \sim \triangle ADB \leftarrow \begin{matrix} \angle ECB = \angle ADB \\ \angle EBC = \angle ABD \end{matrix} \quad \angle EBC = \angle ABD$ (S.S) $\angle ADB = \angle ECB$

$+ AE \cdot DB = DC \cdot AB$ (1)

$\frac{DC}{AE} = \frac{CB}{EB} = \frac{DB}{AB}$ (C)

$EC \cdot DB = AD \cdot CB$ (2)

$\frac{EB}{AB} = \frac{CB}{DB} = \frac{EC}{AD}$ (C)

$DB(AE + EC) = AB \cdot DC + AD \cdot CB$

$DB \cdot AC = AB \cdot DC + AD \cdot CB$