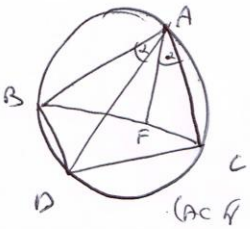
1.115

6.



א. $\triangle ABD \sim \triangle AFC$ (ז.ז)

$$\Downarrow$$

$$\frac{BD}{FC} = \frac{AD}{AC}$$

ב. $\measuredangle DAC = \measuredangle DAF + \measuredangle FAC$

$= \measuredangle DAF + \measuredangle BAD = \measuredangle BAF$

(נשענות על AC) $\measuredangle ABC = \measuredangle ADC$

$$\Downarrow$$

$\triangle BAF \sim \triangle DCA$ (ז.ז)

ג. מסעיף ב' מתקבל $\frac{DC}{BF} = \frac{AC}{AF} = \frac{AD}{AB}$

$AB \cdot DC = BF \cdot AD$

$+$ נוסף את סעיף א' ונקבל $AC \cdot BD = FC \cdot AD$

$AB \cdot DC + DC \cdot BD = AD(BF + FC)$

$AB \cdot DC + DC \cdot BD = AD \cdot BC$