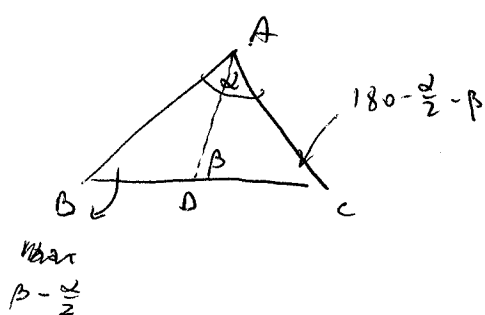


49



$$\frac{a}{\sin \alpha} = \frac{AC}{\sin(\beta - \frac{\alpha}{2})}$$

$$AC = \frac{a \sin(\beta - \frac{\alpha}{2})}{\sin \alpha}$$

מחר
 $\beta - \frac{\alpha}{2}$

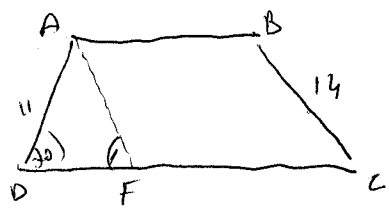
$$\frac{AD}{\sin(180 - \frac{\alpha}{2} - \beta)} = \frac{AC}{\sin \beta}$$

$$AD = \frac{a \sin(\beta - \frac{\alpha}{2}) \cdot \sin(180 - \frac{\alpha}{2} - \beta)}{\sin \alpha \sin \beta} = \frac{a \sin(\beta - \frac{\alpha}{2}) \sin(\frac{\alpha}{2} + \beta)}{\sin \alpha \sin \beta}$$

$\sin(180 - \frac{\alpha}{2} - \beta) = \sin(\frac{\alpha}{2} + \beta)$

AD = 5.913 ב. (צ"ל) המסומן

15



$AF = FC$ ע"פ הנתון

ΔADF - ב. של המסומן

$$\frac{11}{\sin x} = \frac{14}{\sin 70} \Rightarrow x = 47.589$$

ב. הסכום של אורכי הבסיסים

$$8 = FC$$

$$\frac{DF}{\sin(180 - 70 - 47.589)} = \frac{14}{\sin 70}$$

DF = 13.2

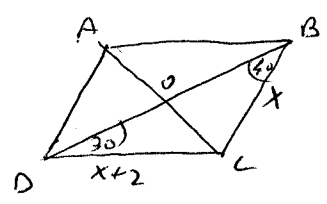
DC = DF + FC = 21.2

ה' אורכי אורכי הבסיסים

$$h = 11 \sin 70 = 10.34$$

$$S = \frac{(AB + BC)h}{2} = 150.964$$

8



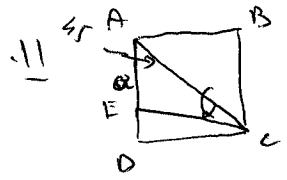
$$\frac{x}{\sin 30} = \frac{x+2}{\sin 40} \Rightarrow x = 7$$

$x+2 = 9$

ה' האנכית הנובעת מזה

$$\frac{AC}{\sin(180 - 45 - \alpha)} = \frac{a}{\sin \alpha}$$

$$AC = \frac{a \sin(135 - \alpha)}{\sin \alpha} = \frac{a \sin(45 + \alpha)}{\sin \alpha}$$



ב. ה' הנובעת מזה

$$S_{ABCD} = \frac{AC^2}{2} = \frac{a^2 \sin^2(45 + \alpha)}{2 \sin^2 \alpha}$$

<http://heshbonia.com/> כל הזכויות שמורות ל

$$S_{AEC} = \frac{AC \cdot AE \sin \alpha}{2} = \frac{a^2 \sin(45 + \alpha) \sin 45}{2 \sin \alpha}$$