

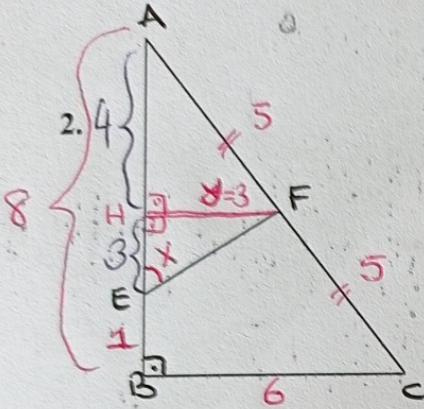
Ad Soyad:
No:
İmza:

Cevap Anahtarı

09.11.2024

MAT 333 GEOMETRİ ARA SINAV SORULARI

1. Öklid teoremini ifade ve ispat ediniz. (Bkz Ders Notları)



$$|AF| = |FC| = 5$$

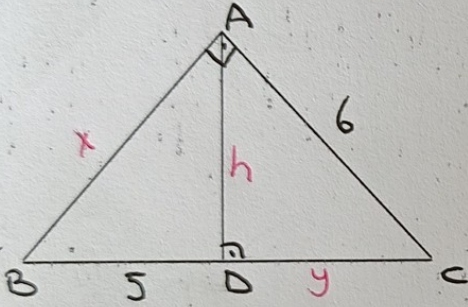
$$|BC| = 6, |EB| = 1$$

$$m(\widehat{AEF}) = x = ?$$

$$\triangle AHF \sim \triangle ABC \Rightarrow \frac{4}{6} = \frac{5}{10} \Rightarrow 4 = 3$$

$$\triangle EHF \text{ ikizkenar } \Rightarrow x = 45^\circ$$

3.



Şekle göre, $|BD| = 5$, $|AC| = 6$ ise,

$$|AB| = ?, |AD| = ?$$

$$\triangle ABC \sim \triangle DAC \Rightarrow \frac{5+y}{6} = \frac{6}{y} = \frac{x}{h}$$

$$\text{Öklid } h^2 = 5y$$

$$x^2 = 5(5+y)$$

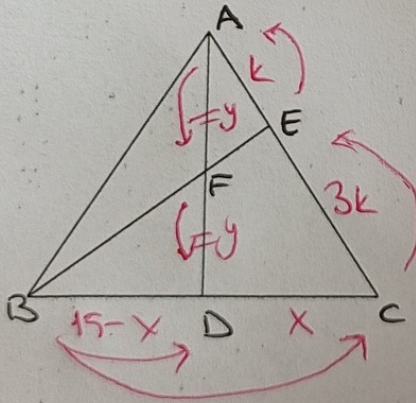
$$6^2 = y(5+y)$$

$$y = 4$$

$$x^2 = 45 \Rightarrow x = 3\sqrt{5}$$

$$h^2 = 20 \Rightarrow h = 2\sqrt{5}$$

4.



$$|AF| = |FD|, 3|AE| = |EC|$$

$$|BC| = 15 \text{ ise } |BD| = ?$$

Menelaus Teo

$$\frac{15-x}{15} \cdot \frac{3k}{k} \cdot \frac{y}{y} = 1 \Rightarrow x = 10$$

$$|BD| = 5$$

Süre: 75 dk

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