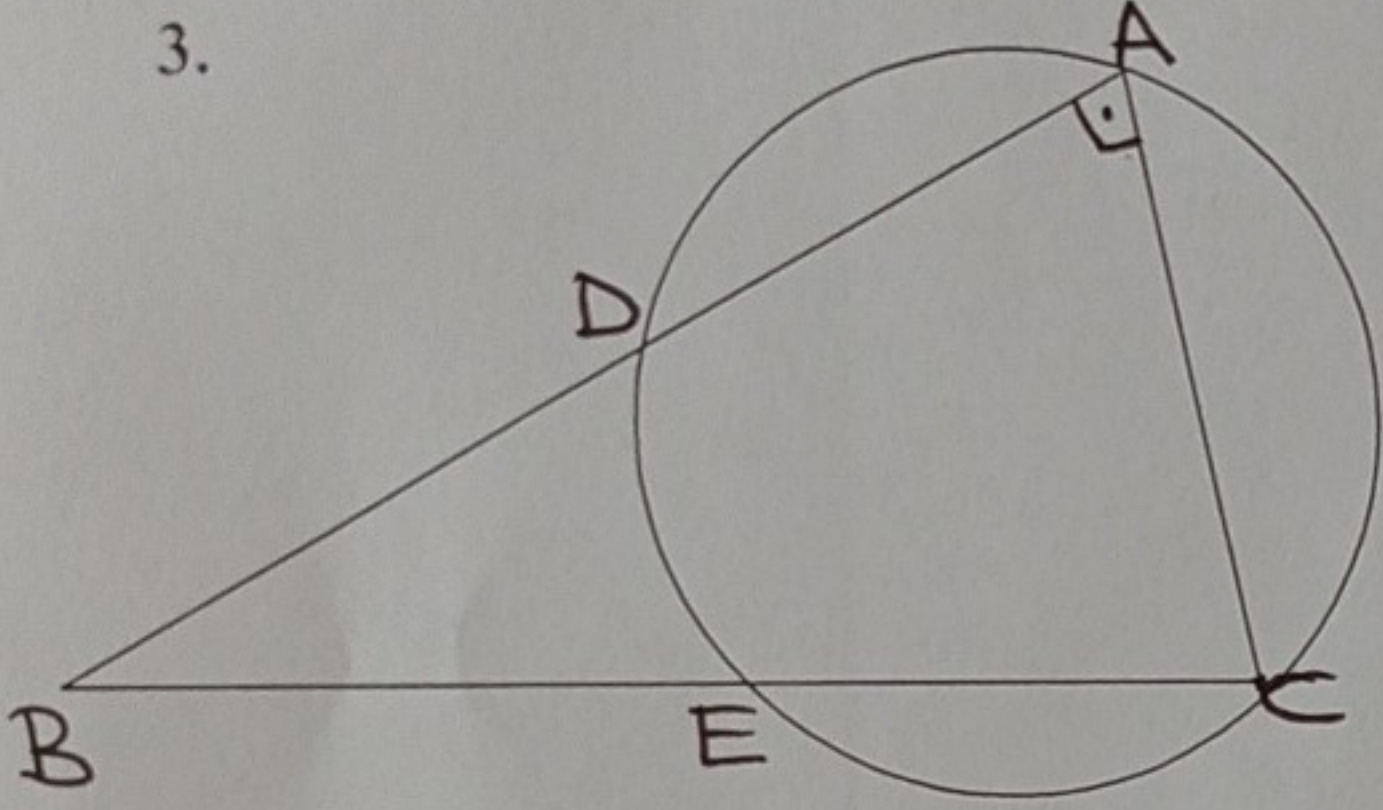


MAT 333 GEOMETRİ BÜTÜNLEME SINAVI SORULARI

1. Menelaus teoremini ifade ve ispat ediniz.
2. Bir çemberde paralel doğrular arasında kalan yayların ölçüleri eşittir, gösteriniz.

3.



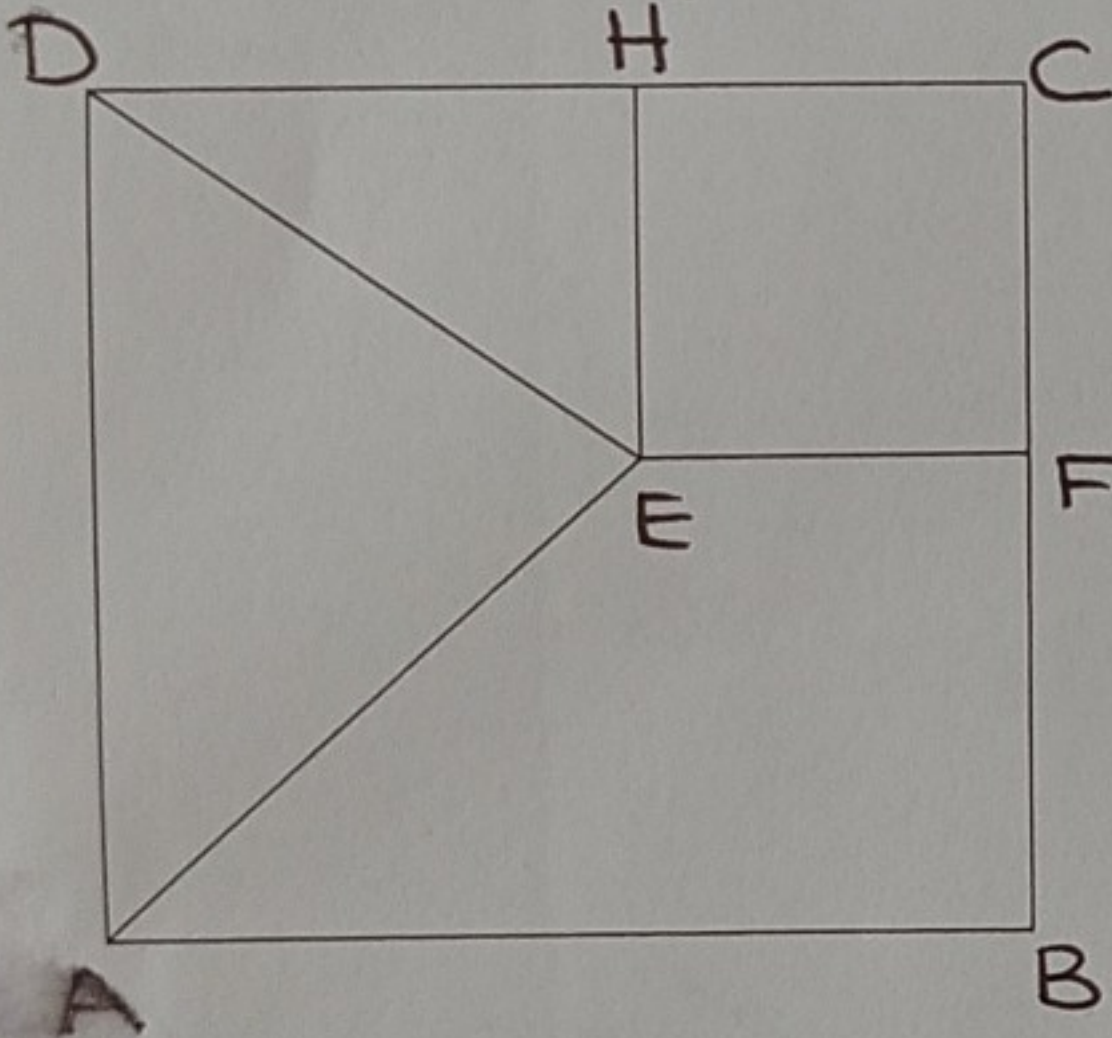
BAC dik üçgen, $[AB] \perp [AC]$,

$$|BD| = 5 \text{ cm}, \quad |BE| = 4 \text{ cm} \text{ ve}$$

$$|EC| = 6 \text{ cm} \text{ olduğuna göre}$$

çemberin çapı kaç cm dir?

4.

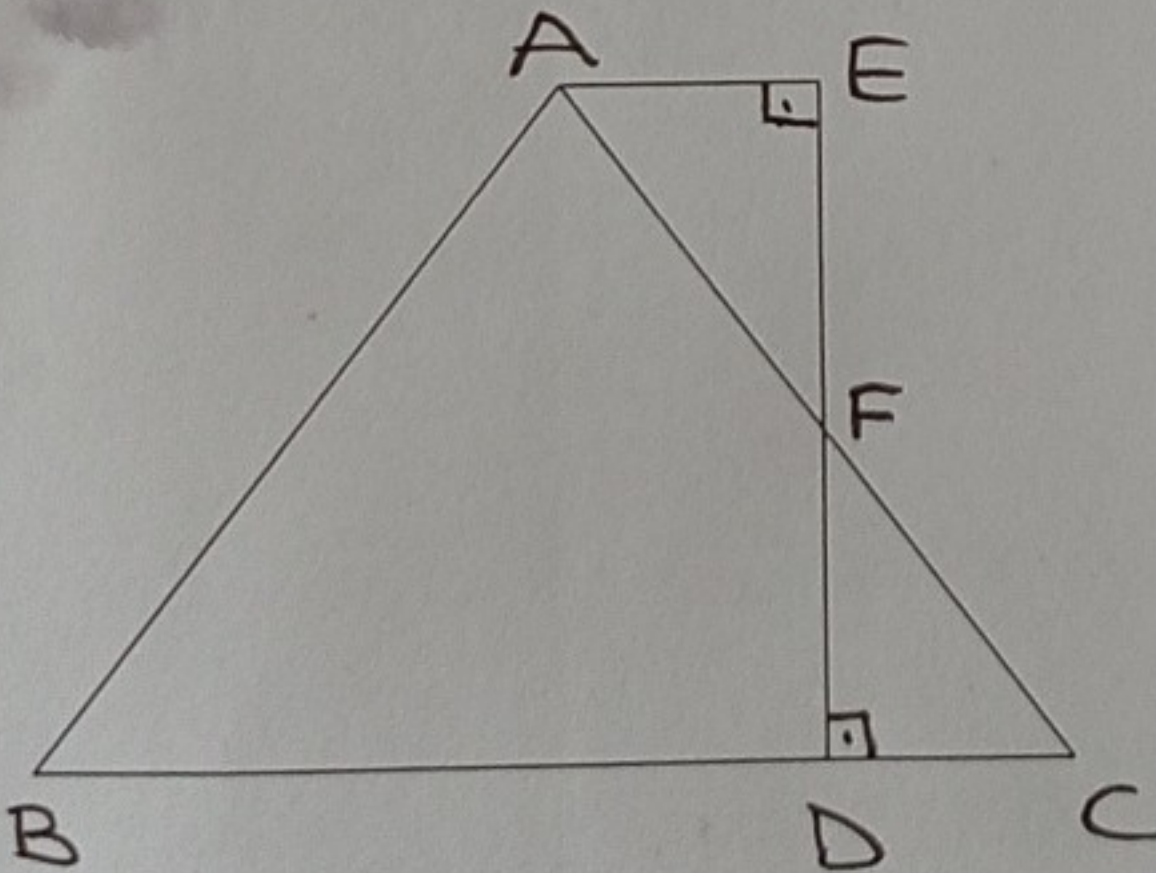


ABCD ve EFCH birer kare

$$|DE| = 4\sqrt{10} \text{ cm}, \quad |AE| = 12\sqrt{2} \text{ cm}$$

$$\text{ise } |AB| = ?$$

5.



$$|AB| = |AC| \text{ ve } \frac{|EF|}{|FD|} = \frac{2}{3} \text{ ise}$$

$$\frac{|DC|}{|BD|} = ?$$

Süre 90 dk

CEVAPLAR;

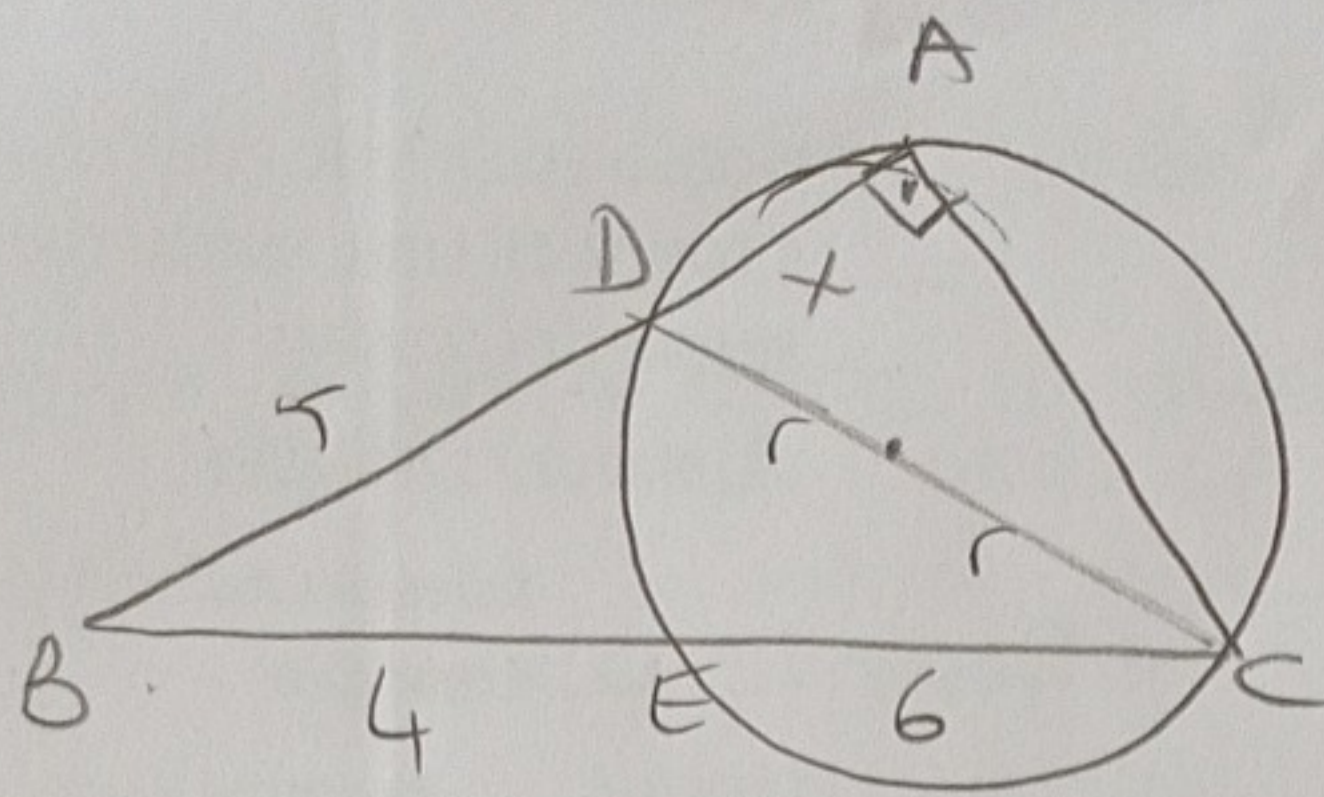
BAŞARILAR

Doç. Dr. Fatma GÜLER

1) Bknz ders notları,

2) " "

3)



$|AD| = x$ dersek B noktasına göre kuvvet,

$$5(5+x) = 4 \cdot (4+6)$$

$$25 + 5x = 40$$

$$\boxed{x = 3}$$

$\triangle ABC$ dik üçgen,

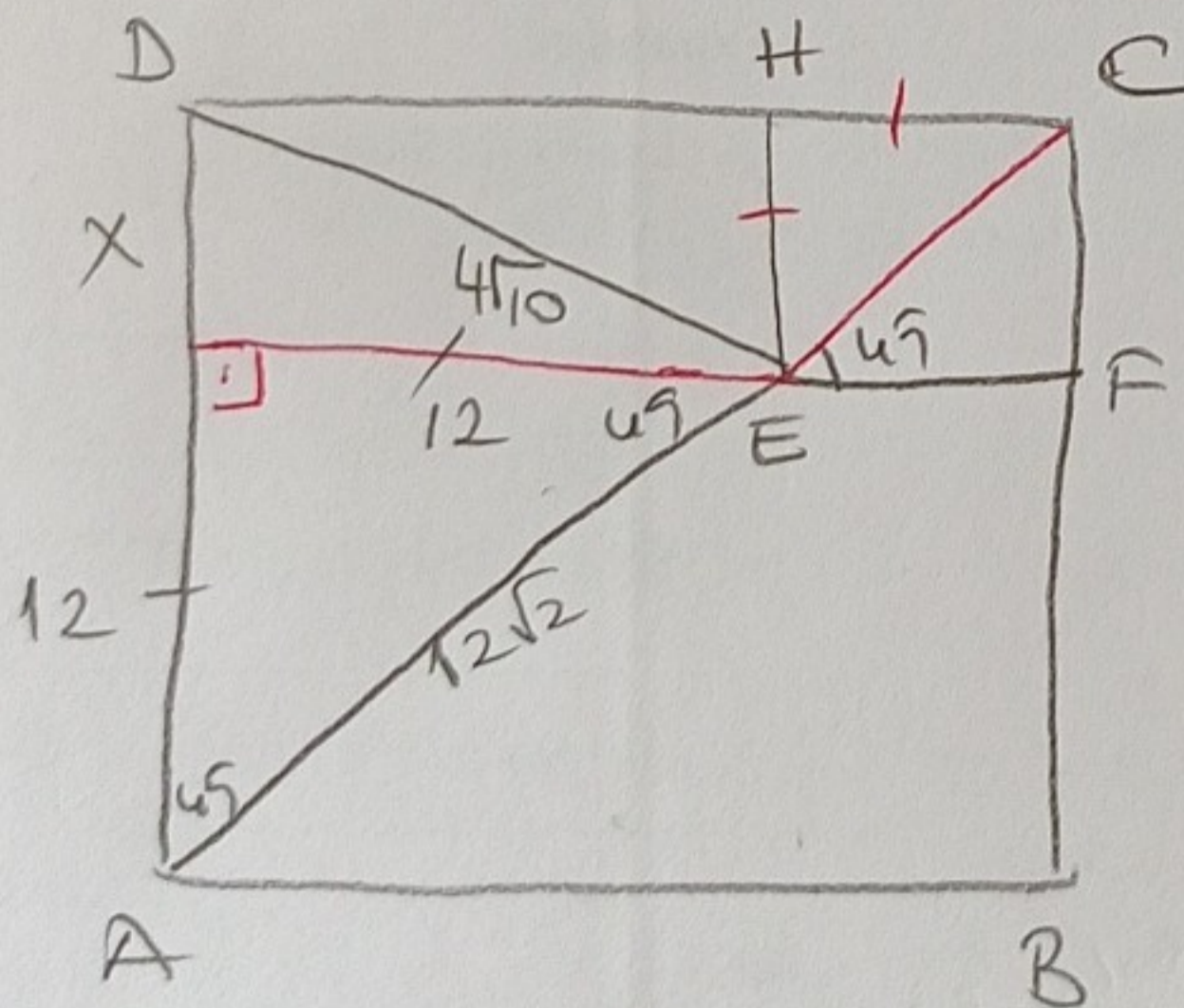
$$|AB|^2 + |AC|^2 = |BC|^2$$

$$8^2 + |AC|^2 = 10^2$$

$$\boxed{|AC| = 6}$$

$$(2) R^2 = 3^2 + 6^2 \Rightarrow R = 3\sqrt{5}$$

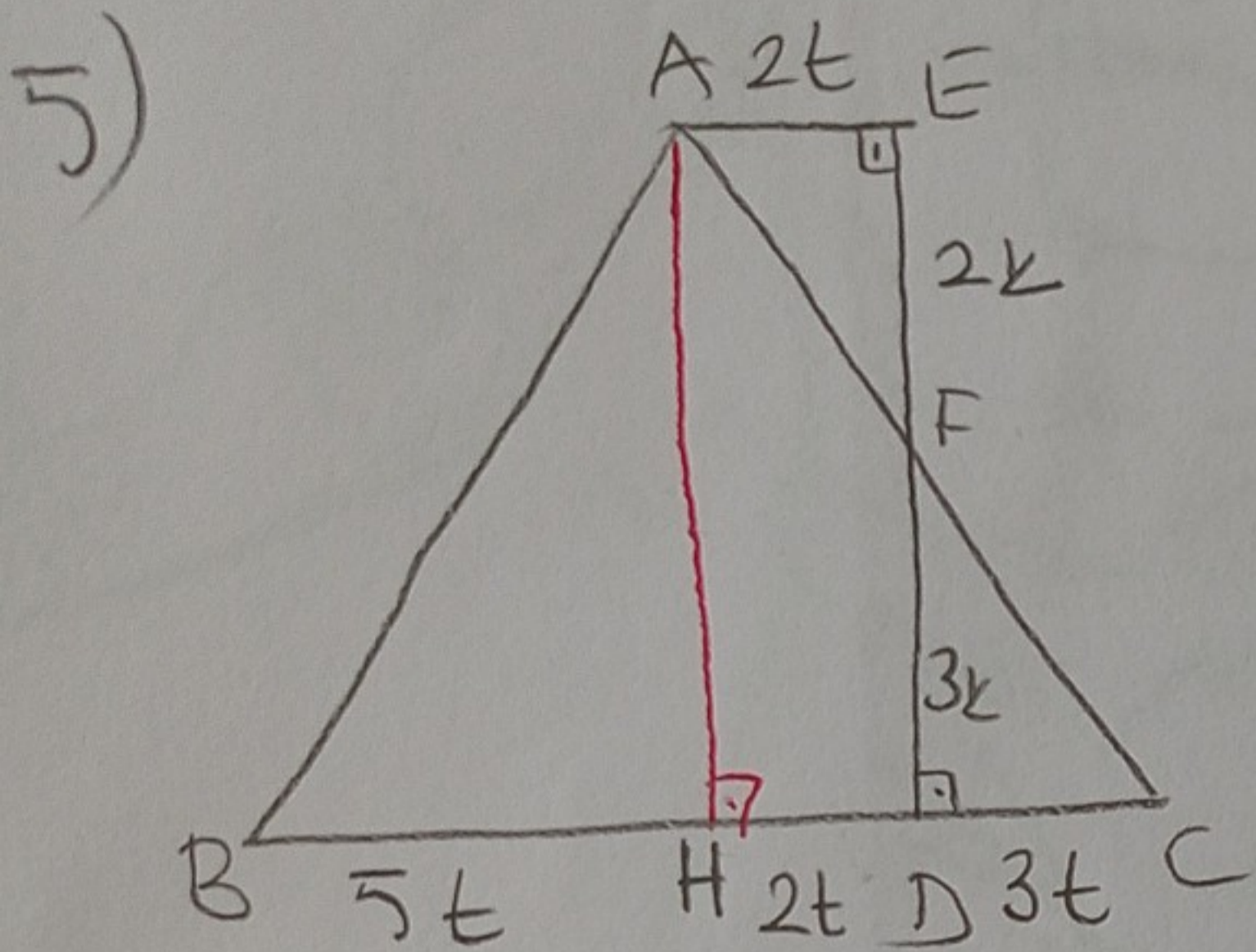
4)



$$12^2 + x^2 = (4\sqrt{10})^2$$

$$x = 4$$

$$|AB| = 12 + 4 = 16$$



$\triangle AEF$ ile $\triangle CDF$
benzer old. den

$$\frac{|EF|}{|FD|} = \frac{|AE|}{|DC|} = \frac{2}{3}$$

$\triangle ABC$ ikizkenar d. den $|BH| = |HC|$ dir.

$$\frac{|DC|}{|BD|} = \frac{3t}{7t} = \frac{3}{7} \text{ bulunur.}$$