Zadatak 15. Stranice trokuta ABC leže na pravcima $2x-9y-30=0$, $2x-y+2=0$ i $6x+5y-26=0$. Koje od navedenih točaka leže unutar trokuta ABC: $D(-1,-2)$, $E(2,3)$, $F(5,0)$, $G(4,1)$, $H(5,-1)$?

Rješenje.

$a \ldots 2x-9y-30=0$

$b \ldots 2x-y+2=0$

$c \ldots 6x+5y-26=0$

$a \cap b$

$$\left.\begin{array}{r} 2x-9y-30=0 \\ 2x-y+2=0 \end{array}\right\} -$$

$$-8y-32=0$$

$$y=-4$$

$$2x+4+2=0$$

$$2x=-6 \qquad A(-3,-4)$$

$$x=-3$$

$a \cap c$

$$\left.\begin{array}{r} 2x-9y-30=0 \quad /\cdot(-3) \\ 6x+5y-26=0 \end{array}\right\} -$$

$$32y+64=0$$

$$y=-2$$

$$2x-9\cdot(-2)-30=0$$

$$2x=12 \qquad B(6,-2)$$

$$x=6$$

$b \cap c$

$$\left.\begin{array}{r} 2x-y+2=0 \quad /\cdot(-3) \\ 6x+5y-26=0 \end{array}\right\} -$$

$$8y-32=0$$

$$y=4$$

$$2x-4+2=0$$

$$2x=2 \qquad C(1,4)$$

$$x=1$$