

Ulohy se striky N.

28/3.31 OR přímky AB: a) $A[3; -4]$ $B[-7; 1]$

$$ax + by + c = 0$$

$$x + 2y + c = 0$$

$$\vec{u} = \vec{AB} = (-10; 5) \text{ a } \vec{m} = (5; 10) = (1; 2)$$

$$A: 3 - 8 + c = 0 \quad c = 5$$

$$AB: \underline{x + 2y + 5 = 0}$$

28/3.32 OR přímky π : $A \in \pi$, $\pi \perp \vec{u}$

$$a) A[-2; 9] \quad \vec{u} = (3; -1)$$

$$ax + by + c = 0$$

$$3x - y + c = 0$$

$$A: -6 - 9 + c = 0 \quad c = 15$$

$$\underline{3x - y + 15 = 0}$$



28/3.33 OR přímky π : $A \in \pi$, $\pi \perp \vec{v} = \vec{BC}$

$$a) A[4; -7], B[-9; 5], C[-6; 1]$$

$$\vec{v} = \vec{BC} = (3; -4)$$

$$3x - 4y + c = 0$$

$$A: 12 - 28 + c = 0 \quad c = -40$$

$$\vec{m}_\pi = \vec{v} = (3; -4)$$

$$\underline{\pi: 3x - 4y - 40 = 0}$$

28/3.35 který z bodů leží na přímce $\pi: 3x - 2y + 7 = 0$

$$A[1; 2] \quad A: 3 - 4 + 7 = 0 \quad 6 = 0 \Rightarrow A \notin \pi$$

$$B[-3; -1] \quad B: -9 + 2 + 7 = 0 \quad 0 = 0 \Rightarrow B \in \pi$$

28/3.37 OR osy úsečky AB

$$a) A[3; -7] \quad B[-1; -5]$$

$$S[1; -6]$$

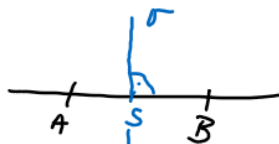
$$\vec{u} = \vec{AB} = (-4; 2) = \vec{m}_r$$

$$ax + by + c = 0$$

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

$$S: -4 - 12 + c = 0 \quad c = 16$$

$$r: \underline{-4x + 2y + 16 = 0 \Rightarrow 2x - y - 8 = 0}$$



28/3.38 OR přímky Δ PV:

$$a) x = 3 - 2z \quad A[3; -4]$$

$$y = -4 + z$$

$$\vec{u} = (-2; 1) \Rightarrow \vec{m} = (1; 2)$$

$$x + 2y + c = 0$$

$$A: 3 - 8 + c = 0 \quad c = 5$$

$$\underline{x + 2y + 5 = 0}$$

29/3.39 ΔABC : $A[1; -3]$ $B[-5; 7]$ $C[3; 11]$

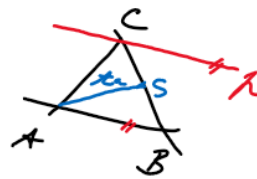
napřítka OR:

b) přímky π : $C \in \pi$, $\pi \parallel AB$

$$\vec{u} = \vec{AB} = (-6; 10) \Rightarrow (-3; 5) \Rightarrow \vec{m} = (5; 3)$$

$$5x + 3y + c = 0$$

$$C: 15 + 33 + c = 0 \quad c = -48 \quad \underline{\pi: 5x + 3y - 48 = 0}$$



c) rovnice ΔA (π_a)

$$S[-1; 9]$$

$$\vec{u} = \vec{AS} = (-2; 12) \Rightarrow (-1; 6)$$

$$\vec{m} = (6; 1)$$

$$\pi_a: 6x + y + c = 0$$

$$A: 6 - 3 + c = 0 \quad c = -3$$

$$\underline{6x + y - 3 = 0}$$