

Rezolvare

$$1. 2x - 1 \geq 0 \Rightarrow x \in \left[\frac{1}{2}, \infty \right)$$

$$2x - 1 = 1 \Rightarrow 2x = 2 \Rightarrow x = 1.$$

$$2. \vec{a} + \vec{b} + \vec{c} = 2\vec{i} + 3\vec{j}$$

$$3. D_s = S \frac{r}{100} t = 4000 \frac{25}{100} 5 = 5000 lei$$

$$4. \frac{2^{n+2} - 1}{2 - 1} = 1023 \Rightarrow 2^{n+2} = 1024 \Rightarrow 2^{n+2} = 2^{10} \Rightarrow n + 2 = 10 \Rightarrow n = 8.$$

$$5. S = 3, P = a \Rightarrow 2S + 5P = 0 \Rightarrow 6 + 5a = 0 \Rightarrow a = \frac{-6}{5}$$

$$6. \cos B = \frac{c}{a}; \cos C = \frac{b}{a} \Rightarrow \cos^2 B + \cos^2 C = \frac{c^2}{a^2} + \frac{b^2}{a^2} = 1$$