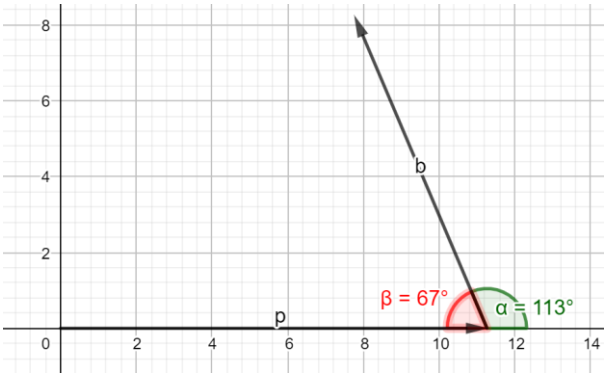
	Navn:		Skole:	
	Klasse: 20		Dato: 10. september 2021	Fag: Matematik A

Opgave 438

$$|\vec{p}| = 11.3$$
$$|\vec{b}| = 8.98$$
$$v = 113$$
$$v_1 = 67$$



$$\vec{p} = \begin{pmatrix} 11.3 \\ 0 \end{pmatrix}$$

$$\vec{b} = \begin{pmatrix} \cos(v_1) \cdot |\vec{b}| \\ \sin(v_1) \cdot |\vec{b}| \end{pmatrix}$$
$$\vec{b} = \begin{pmatrix} \cos(67) \cdot 8.98 \\ \sin(67) \cdot 8.98 \end{pmatrix}$$
$$\vec{b} = \begin{pmatrix} -0.39 \cdot 8.98 \\ 0.92 \cdot 8.98 \end{pmatrix}$$
$$\vec{b} = \begin{pmatrix} -3.5 \\ 8.3 \end{pmatrix}$$

$$\vec{p} + \vec{b} = \begin{pmatrix} 11.3 - 3.5 \\ 0 + 8.3 \end{pmatrix}$$
$$\vec{p} + \vec{b} = \begin{pmatrix} 7.8 \\ 8.3 \end{pmatrix}$$

$$|\vec{p} + \vec{b}| = \sqrt{x^2 + y^2}$$
$$|\vec{p} + \vec{b}| = \sqrt{7.8^2 + 8.3^2}$$
$$|\vec{p} + \vec{b}| = \sqrt{129.73}$$
$$|\vec{p} + \vec{b}| = 1.39$$

$$\vec{p} - \vec{b} = \begin{pmatrix} 11.3 + 3.5 \\ 0 - 8.3 \end{pmatrix}$$
$$\vec{p} - \vec{b} = \begin{pmatrix} 14.8 \\ -8.3 \end{pmatrix}$$

$$|\vec{p} - \vec{b}| = \sqrt{x^2 + y^2}$$
$$|\vec{p} - \vec{b}| = \sqrt{14.8^2 + (-8.3)^2}$$
$$|\vec{p} - \vec{b}| = \sqrt{287.93}$$
$$|\vec{p} - \vec{b}| = 16.97$$