

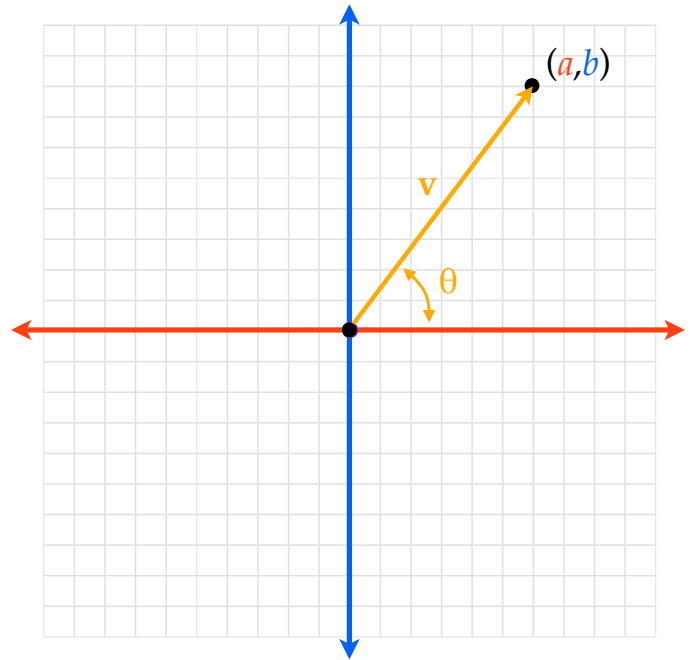
The Direction of Vectors in $a\mathbf{i} + b\mathbf{j}$ Form

Name _____

Date _____ Period _____

Given \mathbf{v} is in standard position and expressed as $\mathbf{v} = a\mathbf{i} + b\mathbf{j}$, then...

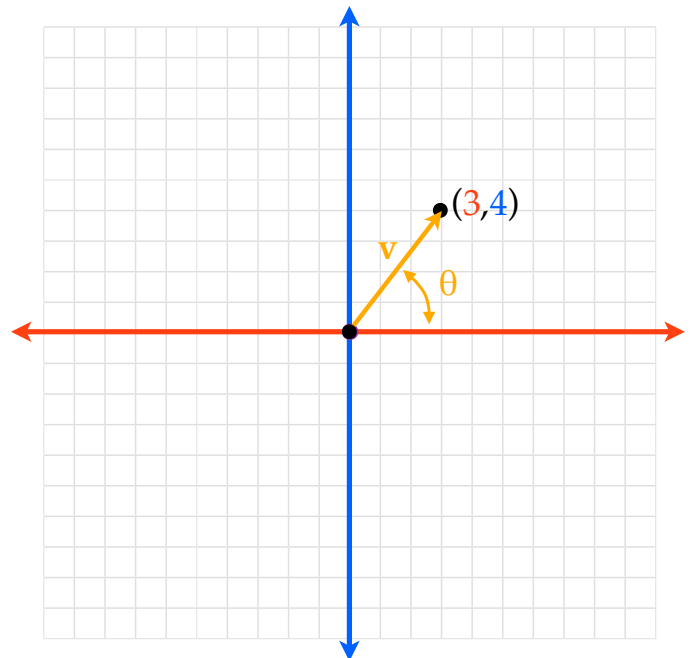
$$\tan \theta = \frac{b}{a} \quad -90^\circ < \theta < 90^\circ$$



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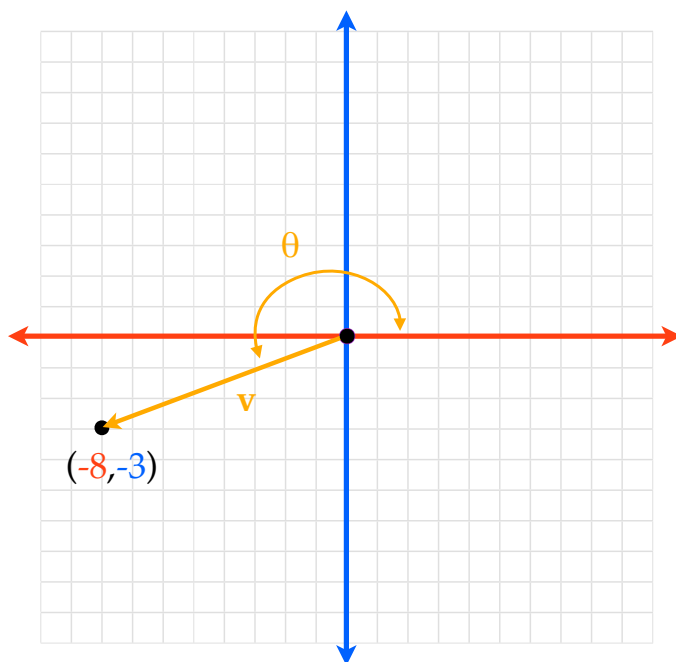
$$\mathbf{v} = 3\mathbf{i} + 4\mathbf{j}$$



Given \mathbf{v} is in standard position and expressed as $\mathbf{v} = a\mathbf{i} + b\mathbf{j}$, then...

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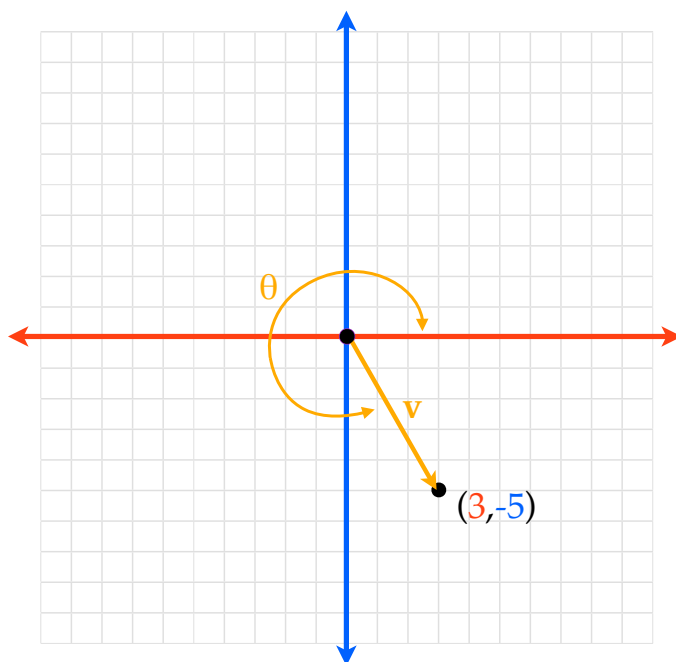
$$\mathbf{v} = -8\mathbf{i} - 3\mathbf{j}$$



Given \mathbf{v} is in standard position and expressed as $\mathbf{v} = a\mathbf{i} + b\mathbf{j}$, then...

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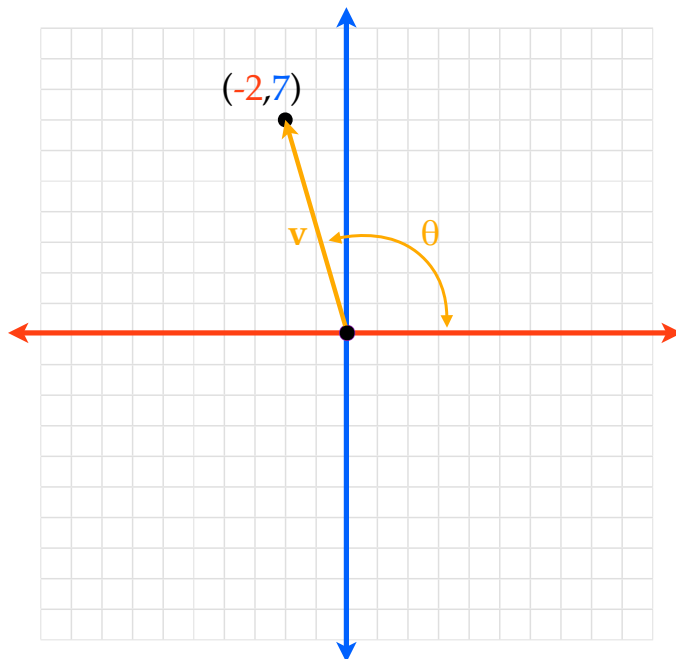
$$\mathbf{v} = 3\mathbf{i} - 5\mathbf{j}$$



Given \mathbf{v} is in standard position and expressed
as $\mathbf{v} = a\mathbf{i} + b\mathbf{j}$, then...

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$$\mathbf{v} = -2\mathbf{i} + 7\mathbf{j}$$



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