

Vectors sample

A vector is a mathematical object that has both magnitude and direction. In a two-dimensional space, vectors can be visualized as arrows and have coordinates like $\vec{v} = (x, y)$.

Output

A vector is a mathematical object that has both magnitude and direction. In a two-dimensional space, vectors can be visualized as arrows and have coordinates like $v = (x, y)$.

Mathematically, vectors are often represented in bold or by arrows. In RST, you can use italics or bold for simple emphasis, but for formal mathematical notation, the `:math:` role (available via Sphinx) is recommended.

Like this:

```
For example, we can describe vector addition, where the resultant vector  $\vec{R}$ 
is the sum of vectors  $\vec{A}$  and  $\vec{B}$ :

.. math::

   \vec{R} = \vec{A} + \vec{B}
```

output

For example, we can describe vector addition, where the resultant vector R is the sum of vectors A and B :

$$\vec{R} = \vec{A} + \vec{B}$$

Vector Diagrams

Since raw RST doesn't have a built-in drawing mechanism, diagrams should be created using external tools (like Inkscape to generate SVG/PNG files) and then included using the `figure` directive. This allows you to include an image along with a caption and optional legend.

Like this:

```
.. figure:: ../images/samplevector.png
   :alt: Diagram of a vector V from origin to (3,4)
   :width: 35%
   :align: center

   A vector  $\vec{V}$  from origin to  $(3,4)$ .
```

output



A vector V from origin to $(3, 4)$.

The image file should be stored in your project's static assets directory. The `:width:` and `:align:` options help control the display of the image in the output document.