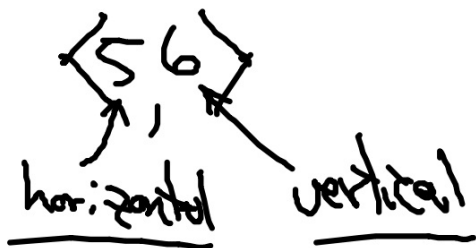


Warm Up 3.12

What is a vector?

Direction

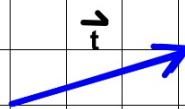
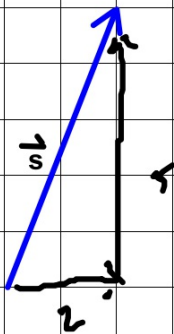


Magnitude

A diagram illustrating the magnitude of a vector. It shows the expression $\|\vec{v}\|$ with a double vertical bar on each side of the vector symbol. A curved arrow points from the word 'Magnitude' above to the double vertical bars.

Below you see vector \vec{s} and \vec{t} .
What is the magnitude of each
vector?

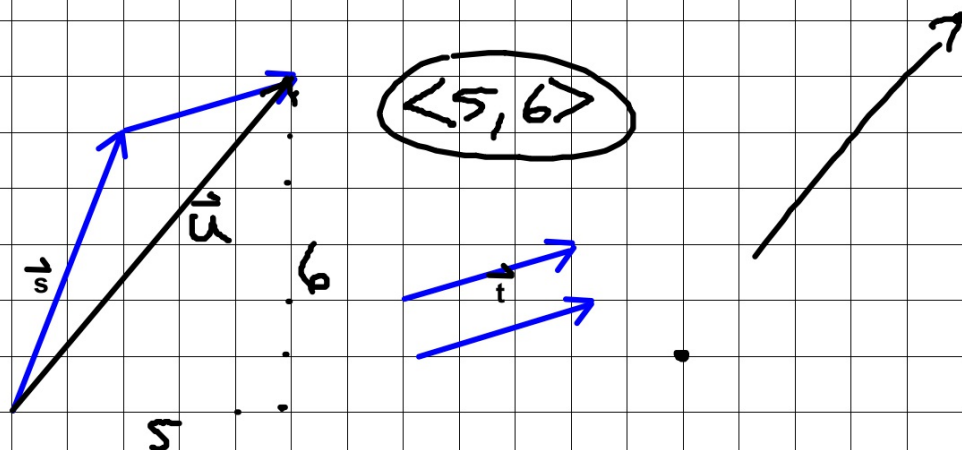
length



$$\|\vec{s}\| = \sqrt{29}$$

$$\|\vec{t}\| = \sqrt{10}$$

If $\vec{s} + \vec{t} = \vec{u}$ then what does vector \vec{u} look like? Draw it.



What is the magnitude of vector \vec{u} ?

$$\|\vec{u}\| = \sqrt{61}$$