

# Adding Vectors

## Two Methods

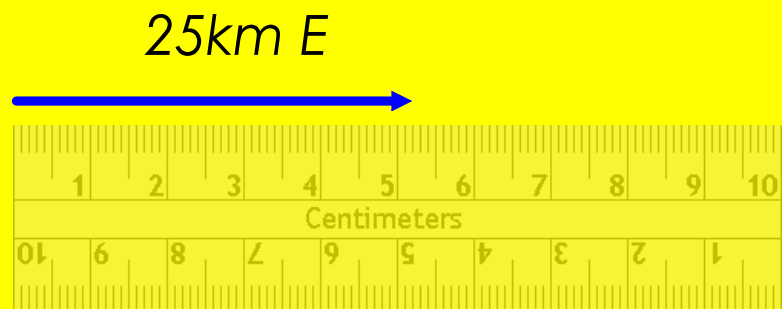
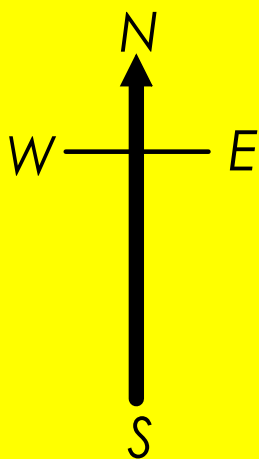
-To scale

-mathematically

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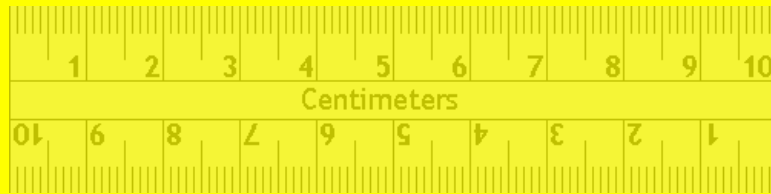
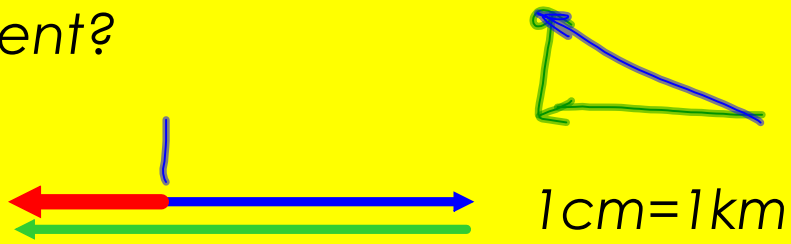
To Scale

Ex:  $1\text{cm} = 5\text{km}$

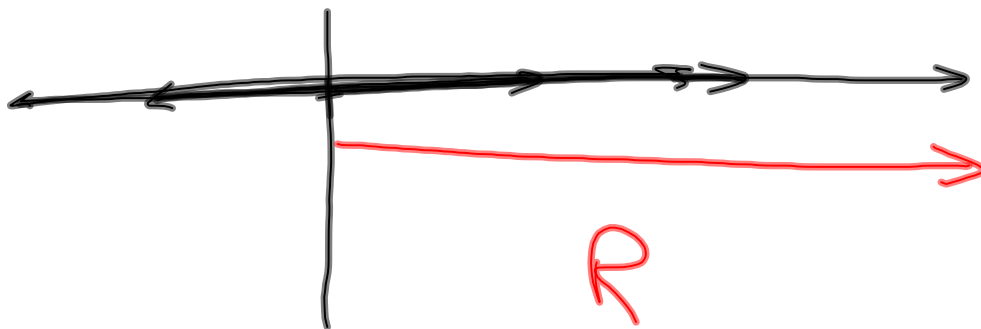


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A boy walks 4km E and then turns and walks 6km W. What is his resultant displacement?



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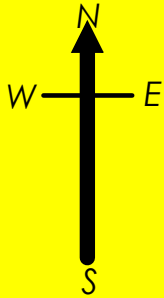


Jan 9-9:17 AM

Mathematically

One direction is determined to be positive, therefore the opposite direction would be negative

From the previous example,



if East is considered +ve, then West is -ve

$$R = (+4\text{km}) + (-6\text{km}) = -2\text{km or } 2\text{km W}$$