

LE TRASLAZIONI

di

vettore $\vec{v} \begin{pmatrix} a \\ b \end{pmatrix}$

ha equazione

$$\begin{cases} X = x + a \\ Y = y + b \end{cases}$$

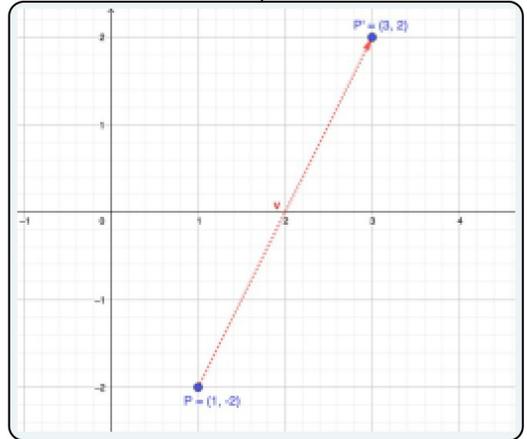
di un punto $P(x,y)$

conosco P e v

uso le equazioni

$$\begin{cases} X = x + a \\ Y = y + b \end{cases}$$

e trovo $P'(X,Y)$



es.

$P(1, -2)$ $\vec{v} \begin{pmatrix} 2 \\ 4 \end{pmatrix}$

$$\begin{cases} X = 1 + 2 = 3 \\ Y = -2 + 4 = 2 \end{cases}$$

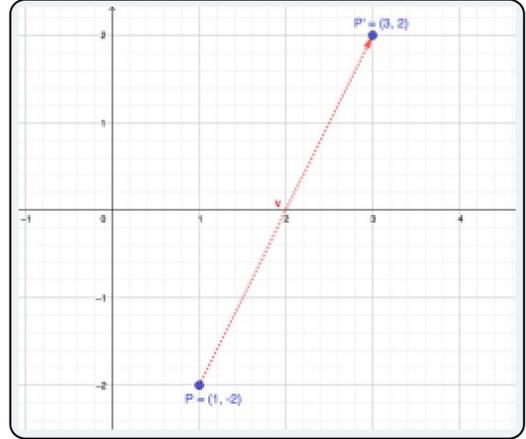
$P'(3, 2)$

conosco P e P'

uso le equazioni

$$\begin{cases} a = X - x \\ b = Y - y \end{cases}$$

e trovo $\vec{v} \begin{pmatrix} a \\ b \end{pmatrix}$



es.

$P(1, -2)$ $P'(3, 2)$

$$\begin{cases} a = 3 - 1 = 2 \\ b = 2 - (-2) = 4 \end{cases}$$

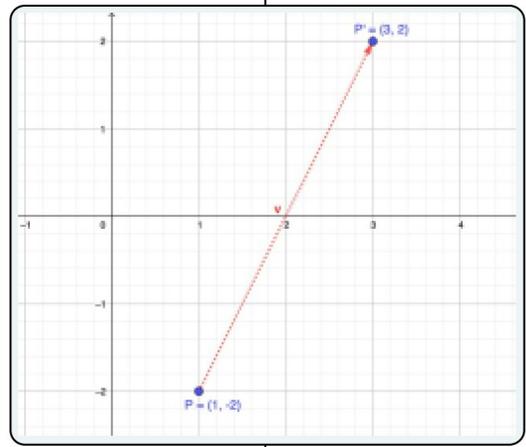
$\vec{v} \begin{pmatrix} 2 \\ 4 \end{pmatrix}$

conosco v e P'

uso le equazioni

$$\begin{cases} x = X - a \\ y = Y - b \end{cases}$$

e trovo $\vec{v} \begin{pmatrix} a \\ b \end{pmatrix}$



es.

$P'(3, 2)$ $\vec{v} \begin{pmatrix} 2 \\ 4 \end{pmatrix}$

$$\begin{cases} x = 3 - 2 = 1 \\ y = 2 - 4 = -2 \end{cases}$$

$P(1, -2)$