



FISIKA

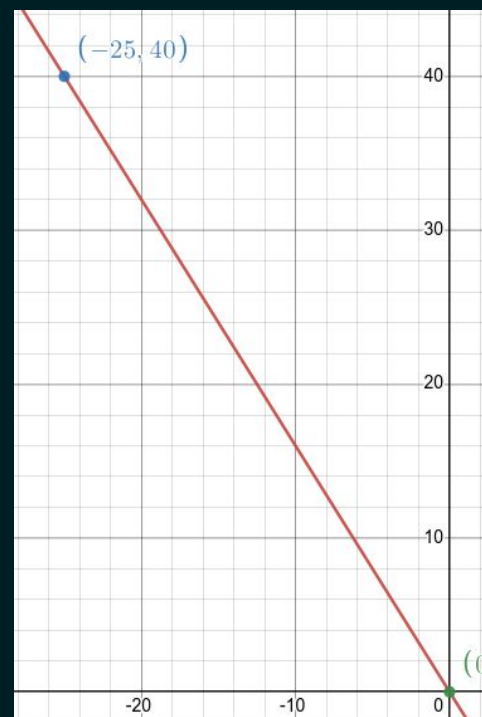
VEKTOR

KOMPONEN VEKTOR

NO. 3

•3 SSM The x component of vector \vec{A} is -25.0 m and the y component is $+40.0$ m. **Problem 2.**
 (a) What is the magnitude of \vec{A} ? (b) What is the angle between the direction of \vec{A} and the positive direction of x ?

- **Diketahui**
 - $A_x = -25$ m
 - $A_y = 40$ m
- **Ditanya**
 - **Besar A**
 - **Sudut antara A dengan sb-x positif**
- **Solusi**



$$\begin{aligned}
 |\vec{A}| &= \sqrt{(A_x)^2 + (A_y)^2} \\
 &= \sqrt{(-25)^2 + (40)^2} \\
 &= 47.17 \text{ m}
 \end{aligned}$$

$$\begin{aligned}
 \theta &= 180 + \arctan\left(\frac{40}{-25}\right) \\
 &= 180 - 58 \\
 &= 122^\circ
 \end{aligned}$$



SUMBER:
Halliday, D., Resnick, R., &
Walker, J. (2013). *Fundamentals of
physics*. John Wiley & Sons.

