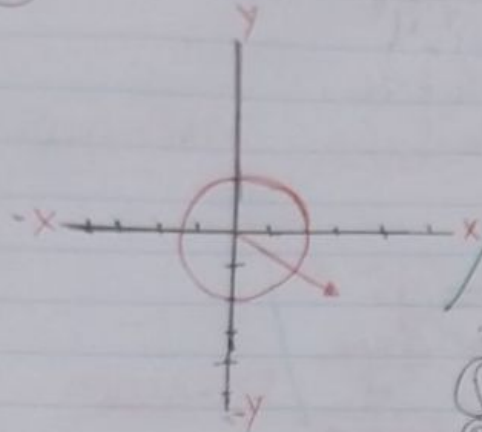


3. $V = \sqrt{3^2 + 2^2}$



$$|V| = \sqrt{3^2 + 2^2}$$

$$|V| = \sqrt{7.50^2 + 4}$$

$$|V| = \sqrt{7} = \underline{2.65 \text{ MAGNITUD}}$$

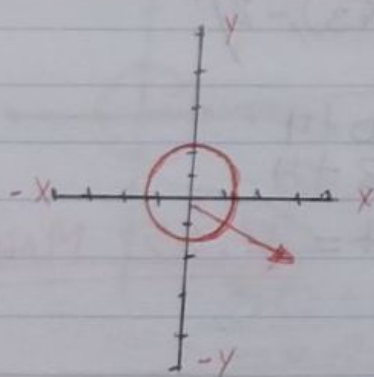
$$\textcircled{1} \tan^{-1} \left(\frac{\sqrt{3}}{2} \right) \left(\frac{2}{3} \right)$$

$$\textcircled{1} \tan^{-1} (1.75) = 49^\circ$$

$$\frac{49}{180} = 0.27 = \underline{0.27}$$

$$360^\circ - 49^\circ = \underline{311^\circ \text{ DIRECCION}}$$

4. $V = (4, -4)$



$$|V| = \sqrt{4^2 + 4^2}$$

$$16 + 16$$

$$\sqrt{32} = \underline{5.66 \text{ MAGNITUD}}$$

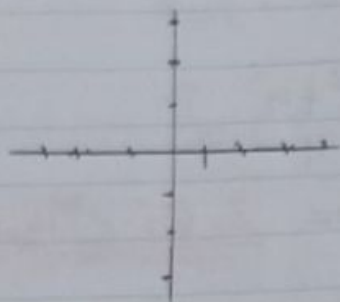
$$\textcircled{1} \tan^{-1} \left(\frac{4}{4} \right)$$

$$\textcircled{1} \tan^{-1} (-1) = -45^\circ$$

$$\frac{45}{180} = 0.25 = \underline{0.25} \quad 360 - 45^\circ = 315^\circ$$

$$\underline{315^\circ \text{ DIRECCION}}$$

5. $|V| = (-4-4)$



$$|V| = \sqrt{4^2 + 4^2}$$

$$= \sqrt{16 + 16}$$

$$\sqrt{32} = 5.66$$

MAGNITUDE.

① $\tan^{-1} \left(\frac{-4}{-4} \right)$

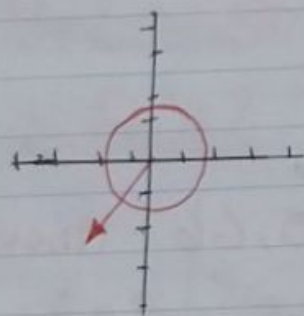
① $\tan^{-1} (1) = 45^\circ$

$$\frac{45^\circ}{180^\circ} = 0.25 = \frac{\pi \text{ RAD}}{4}$$

$$180^\circ + 45^\circ = 225^\circ$$

DIRECTION

6. $|V| = (-\sqrt{3}-2)$



$$|V| = \sqrt{(-\sqrt{3})^2 + (-2)^2}$$

$$\sqrt{1.50 + 4}$$

$$= \sqrt{5.5}$$

① $\tan^{-1} \left(\frac{-2}{-\sqrt{3}} \right)$

① $\tan^{-1} (1.15) = 49^\circ$

$$\frac{49^\circ}{180^\circ} = 0.27 = \frac{\pi \text{ RAD}}{4}$$

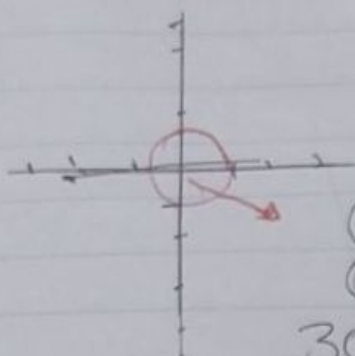
$$180^\circ + 49^\circ = 229^\circ$$

DIRECTION

7) $V = (\sqrt{3}, -2)$

$|V| = \sqrt{(\sqrt{3})^2 + (-2)^2} = \sqrt{3+4} = \sqrt{7}$

$\sqrt{1.50^2 + 1}$
 $3 + 1$



1) $\tan^{-1}(\frac{1}{\sqrt{3}})$

2) $\tan^{-1}(0.57) = -30^\circ$

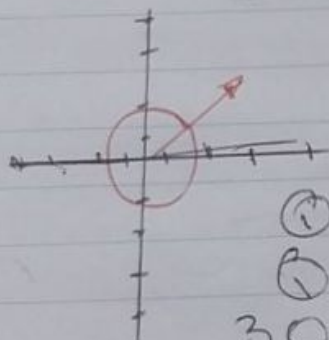
$30 = 0.16 \pm 0.16$

$180^\circ - 30^\circ = 330^\circ$ DIRECTION

$\sqrt{4} = 2$ MAGNITUDE

8) $V = (1/\sqrt{3})$

$|V| = \sqrt{1^2 + (\frac{1}{\sqrt{3}})^2}$
 $1 + \frac{1}{3}$
 $\frac{4}{3}$



1) $\tan^{-1}(\frac{1}{\sqrt{3}})$

2) $\tan^{-1}(0.57) = 30^\circ$

$30 = 0.16$

180°

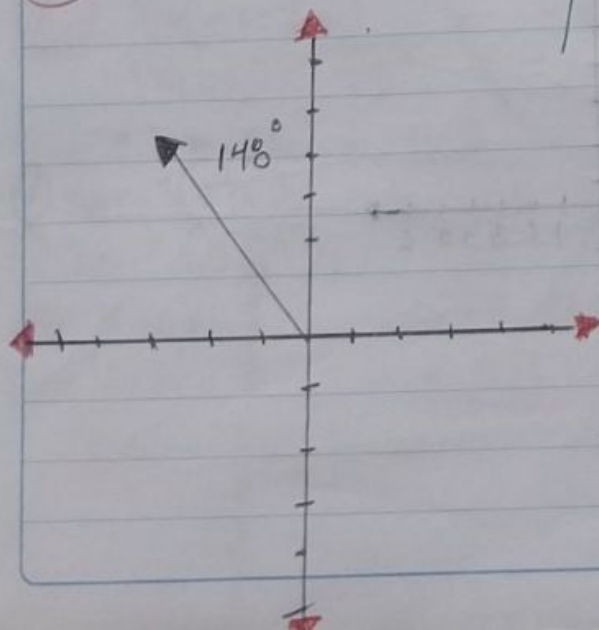
$\sqrt{4} = 2$ MAGNITUDE

30° DIRECTION

15) $V = (-5, 8)$

$|V| = \sqrt{(-5)^2 + 8^2}$
 $25 + 64$

$\sqrt{89} = 9.43$ MAGNITUDE



1) $\tan^{-1}(\frac{8}{-5}) = -32^\circ$

$32 = 0.18$

$180^\circ - 32^\circ = 148^\circ$ DIRECTION

$$9) = V = (-2, \sqrt{3})$$

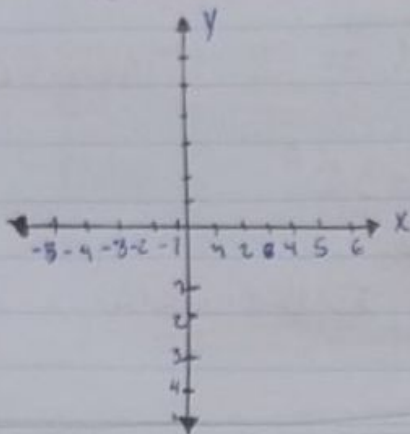
$$V = \sqrt{4+3} = \sqrt{7}$$

$$\phi = (\sqrt{3}/-2) = -40.9^\circ$$

MAGN

$$\theta = 180^\circ - 40.9^\circ = 139.1^\circ$$

DIRECCIÓN



$$10) = V = (-1, \sqrt{3})$$

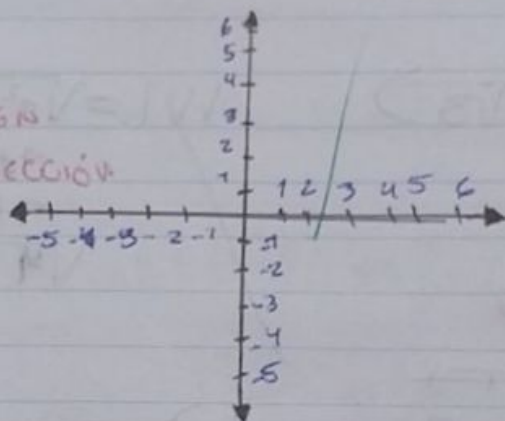
$$V = \sqrt{1+3} = 2$$

MAGN

$$\phi = (\sqrt{3}/-1) = -60^\circ$$

DIRECCIÓN

$$\theta = 120^\circ$$



$$11) = V = (1, \sqrt{3})$$

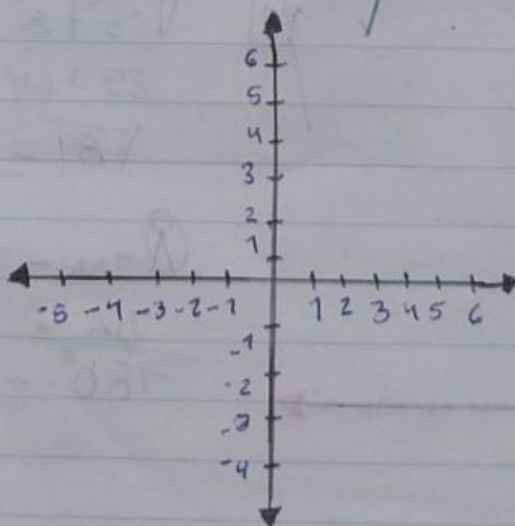
$$V = 2$$

← MAGNITUD

$$\phi = (\sqrt{3}/1) = 60^\circ$$

← DIRECCIÓN

$$\theta = 60^\circ$$

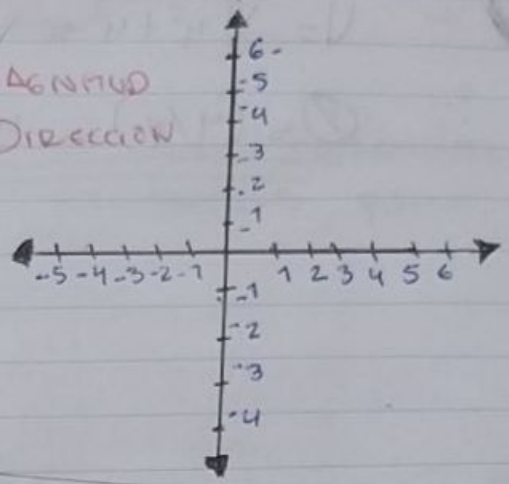


12

$V = (3, 2)$

$V = \sqrt{9+4} = \sqrt{13}$

$\theta = \tan^{-1}(2/3) = 33.70^\circ$ MAGNITUDE
DIRECTION

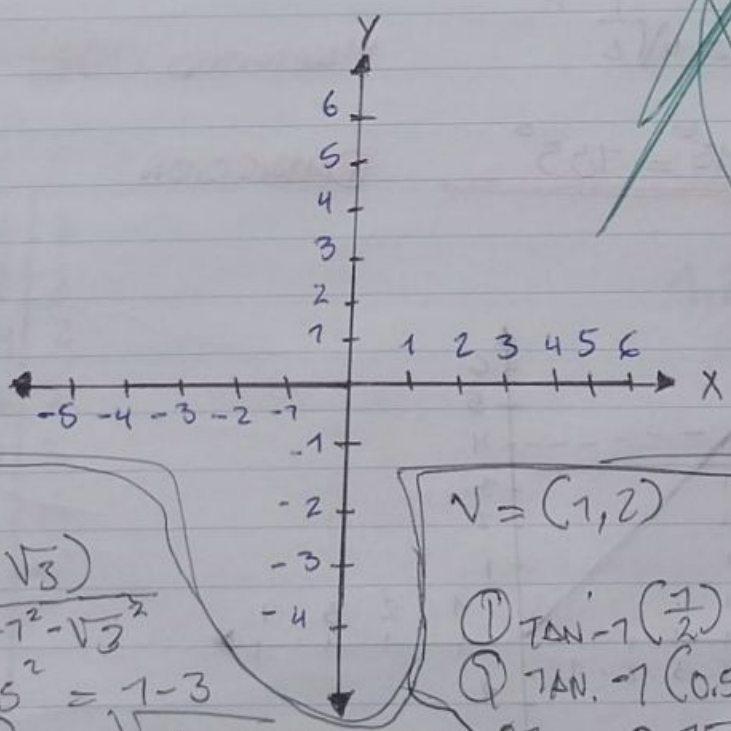


16

$V = (11, -14)$

$V = \sqrt{121 + 196} = \sqrt{317} = 17.8$ MAGNITUDE

$\theta = \tan^{-1}(-14/11) = -51.3^\circ$ DIRECTION



14

13

$V = (-1 - \sqrt{3})$

$|V| = \sqrt{1^2 + (\sqrt{3})^2}$

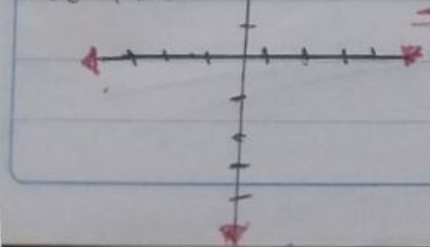
$= 1 + 3 = 4$

$\theta = \tan^{-1}(\sqrt{3})$

$\theta = \tan^{-1}(0.5)$

30°

$180^\circ + 30^\circ$



$V = (1, 2)$

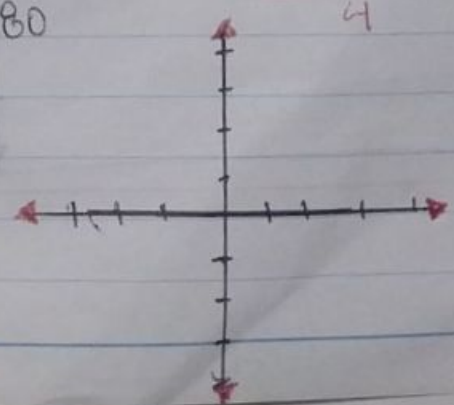
$|V| = \sqrt{1^2 + 2^2} = \sqrt{5} = 2.24$

$\theta = \tan^{-1}(2/1)$

$\theta = \tan^{-1}(0.5) = 27^\circ$

27°

180°



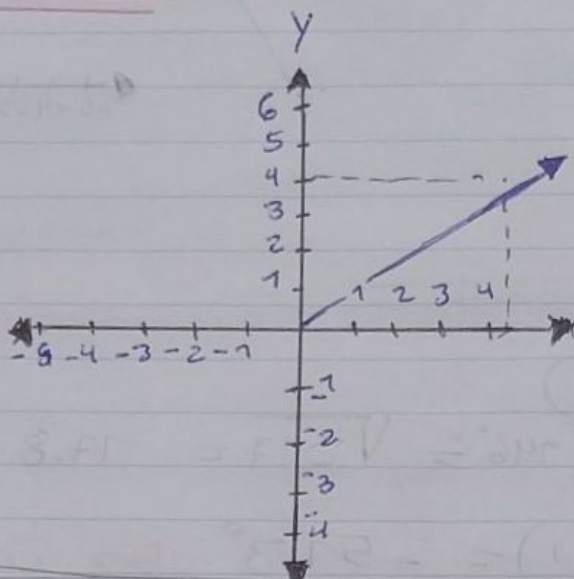
$$\textcircled{1} = V = (4, 4)$$

$$V = \sqrt{4^2 + 4^2} = \sqrt{32} = 4\sqrt{2}$$

MAGNITUD

$$\theta = (4/4) = 45^\circ$$

DIRECCIÓN



$$\textcircled{2} = V = (-4, 4)$$

$$V = \sqrt{16 + 16} = 4\sqrt{2}$$

MAGNITUD

$$\theta = 180^\circ - 45^\circ = 135^\circ$$

DIRECCIÓN

