$$= \arccos\left(\frac{5}{5\sqrt{2}}\right) = \arccos\left(\frac{1}{\sqrt{2}}\right) = \arccos\left(\frac{\sqrt{2}}{2}\right) = 45^\circ$$

b) $r: 3x - 5y + 7 = 0 \quad \vec{v}_r\,(5,3)$

$s: 10x + 6y - 3 = 0 \quad \vec{v}_s\,(-6,10) \equiv (-3,5)$

Observem que $\vec{v}_r \perp \vec{v}_s$ ja que $\vec{v}_r \cdot \vec{v}_s = 0$

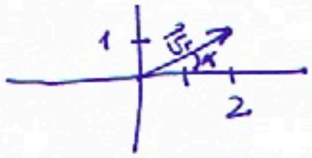
Per tant l'angle que formen és 90°

32

$(r, \widehat{\text{eix de les } X}) = ?$

Eix de les X : $y = 0$

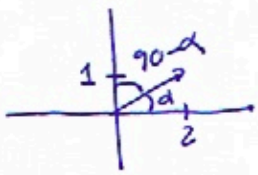
$r: x - 2y + 4 = 0 \Rightarrow \vec{v}_r\,(2,1)$



$tg\,\alpha = \frac{1}{2}$

$\alpha = arctg\left(\frac{1}{2}\right) \simeq 26{,}57^\circ$

$(r, \widehat{\text{eix de les } Y}) = ?$



$90 - \alpha = 63{,}43^\circ$

33 $r: 3x + my - 2 = 0 \Rightarrow \vec{v}_r\,(m,-3)$

$s: OX: y = 0 \Rightarrow \vec{v}_s\,(1,0)$

$$(r, \widehat{y=0}) = 60^\circ \Longleftrightarrow \frac{|\vec{v}_r \cdot \vec{v}_s|}{|\vec{v}_r||\vec{v}_s|} = \frac{1}{2} \Longleftrightarrow$$

$\cos 60^\circ = \frac{1}{2}$

$$\Longleftrightarrow \frac{1}{2} = \frac{|m|}{\sqrt{m^2 + (-3)^2}\,\sqrt{1^2 + 0^2}} \Longleftrightarrow \frac{|m|}{\sqrt{m^2+9}} = \frac{1}{2} \Longleftrightarrow$$