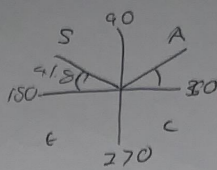


iv) $-3 \sin x = -2$

$\sin^{-1}\left(\frac{2}{3}\right) = 41.81^\circ$

$180 - 41.81 = 138.19^\circ$



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c) factorise $x^2 + 3x - 10$

$(x+5)(x-2)$

$x = -5 \quad x = 2$

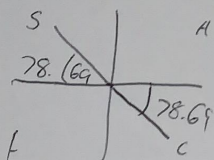
$\tan^2 x + 3 \tan x - 10$

$(\tan x + 5)(\tan x - 2)$

$\tan x = -5 \text{ or } 2$

$\tan^{-1}(5) = 78.69^\circ$

(not answer)



$180 - 78.69 = 101.31^\circ$

$360 - 78.69 = 281.31^\circ$

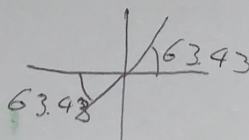
$\tan^2 x + 3 \tan x - 10$

$(\tan - 5)^2 + 3 \tan(5) - 10$

$x^2 + 3x - 10 = 0$

$(x+5)(x-2)$

$\tan^{-1}(2) = 63.43^\circ$



$180 + 63.43 = 243.43^\circ$

d) $y = \sin^2\left(\frac{3\theta}{2}\right)$

$2y = \sin^2 3\theta$

$\sin^{-2} 2y = 3\theta$

$\sin^{-2}\left(\frac{2y}{3}\right)$

$\sin^{-2}\left(\frac{2y}{3}\right) = \theta$