

1880

α) Πρέπει:  $9 - x^2 > 0$

$$9 - x^2 = 0 \Leftrightarrow x^2 = 9 \Leftrightarrow x = 3 \text{ ή } x = -3$$

$x$	$-\infty$	$-3$	$3$	$+\infty$
$9 - x^2$		$-$	$+$	$-$
$\alpha = -100$				

άρα:  $A = (-3, 3)$

β)  $y' y: x = 0 \in A \Leftrightarrow f(0) = \frac{0+2}{\sqrt{9-0^2}} = \frac{2}{3}$

άρα:  $(0, \frac{2}{3})$

$x' x: y = 0 \Leftrightarrow f(x) = 0 \Leftrightarrow \frac{x+2}{\sqrt{9-x^2}} = 0 \Leftrightarrow x+2=0$   
 $\Leftrightarrow x = -2 \in A$  άρα:  $(-2, 0)$

γ)  $A(-2, 0)$ ,  $B(0, \frac{2}{3})$

$$y = \alpha x + \beta \begin{array}{l} \xrightarrow{A} 0 = -2\alpha + \beta \Rightarrow \beta = 2\alpha \\ \xrightarrow{B} \frac{2}{3} = \alpha \cdot 0 + \beta \Rightarrow \beta = \frac{2}{3} \end{array}$$

$$\text{άρα: } \alpha = \frac{\beta}{2} = \frac{\frac{2}{3}}{2} = \frac{1}{3}$$

Οπότε, η εξίσωση της ευθείας AB είναι:

$$y = \frac{1}{3}x + \frac{2}{3}$$