13. $y = \log 2x$

$y' = \frac{1}{2x \ln 10} \cdot 2$

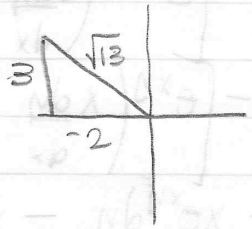
C $y' = \frac{1}{x \ln 10}$

$3 = \frac{1}{x \ln 10}$

$3 \ln 10 = \frac{1}{x}$

$.1447 = x$

14. $\sin\left(\arccos\left(-\frac{2}{\sqrt{13}}\right)\right)$



$13 = 4 + b^2$

$9 = b^2$

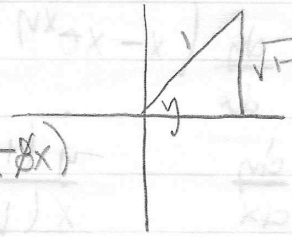
$3 = b$

B $\frac{3}{\sqrt{13}}$

15. $F(x) = \arcsin\sqrt{1-4x^2}$

$\sin y = \sqrt{1-4x^2}$

$\cos y \frac{dy}{dx} = \frac{1}{2}(1-4x^2)^{-1/2}(-8x)$



$a^2 + 1 - 4x^2 = 1$

$a^2 = 4x^2$

$a = \pm 2x$

$a = 2|x|$

B $\frac{dy}{dx} = \frac{1}{\cos y} \cdot \frac{-4x}{\sqrt{1-4x^2}}$

$= \frac{1}{2|x|} \cdot \frac{-4x}{\sqrt{1-4x^2}}$

$\frac{dy}{dx} = \frac{-2x}{|x|\sqrt{1-4x^2}}$