

Soluciones

Tarea 6

$$(14) \quad y = \frac{-3}{\sqrt{1-x^2}} \rightarrow y' = \frac{0 \cdot \sqrt{1-x^2} - (-3) \cdot \frac{1}{2\sqrt{1-x^2}} \cdot (-2x)}{(\sqrt{1-x^2})^2} = \frac{-x}{(1-x^2) \cdot \sqrt{1-x^2}} = \boxed{\frac{-x}{\sqrt{(1-x^2)^3}}}$$

$$(15) \quad y = 7^{x+1} \rightarrow y' = 7^{x+1} \cdot \ln 7 \cdot 1 = \boxed{7^{x+1} \cdot \ln 7}$$

$$(17) \quad y = \ln(3x^6) \rightarrow y' = \frac{1}{3x^6} \cdot 18x^5 = \boxed{\frac{6}{x}}$$

$$(34) \quad y = \sin 2x + \cos 2x \rightarrow y' = \cos 2x \cdot 2 - \sin 2x \cdot 2 = \boxed{2\cos 2x - 2\sin 2x}$$

$$(35) \quad y = \frac{1}{\sqrt{x-4}} \rightarrow y' = \frac{0 \cdot \sqrt{x-4} - 1 \cdot \frac{1}{2\sqrt{x-4}} \cdot 1}{(\sqrt{x-4})^2} = \frac{1}{(x-4) \cdot 2\sqrt{x-4}} = \boxed{\frac{1}{2\sqrt{(x-4)^3}}}$$

$$(41) \quad y = 8^{x^2+x+1} \rightarrow \boxed{y' = 8^{x^2+x+1} \cdot \ln 8 \cdot (2x+1)}$$