Nombre del Alumno: ***Rebeca María Henríquez Villafuerte***

Nombre del tema: ***Ejercicios Variables***

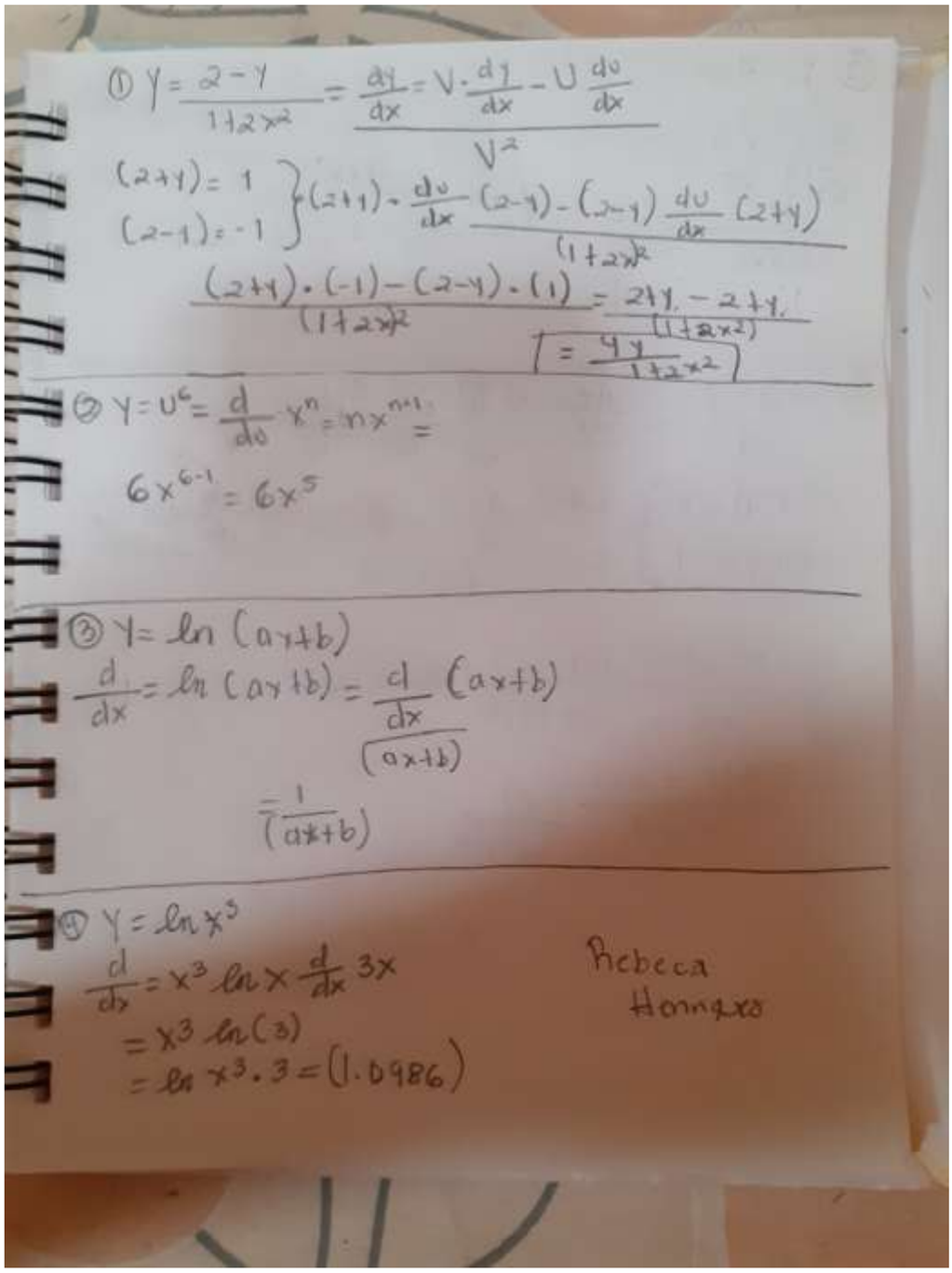
Parcial: ***2°***

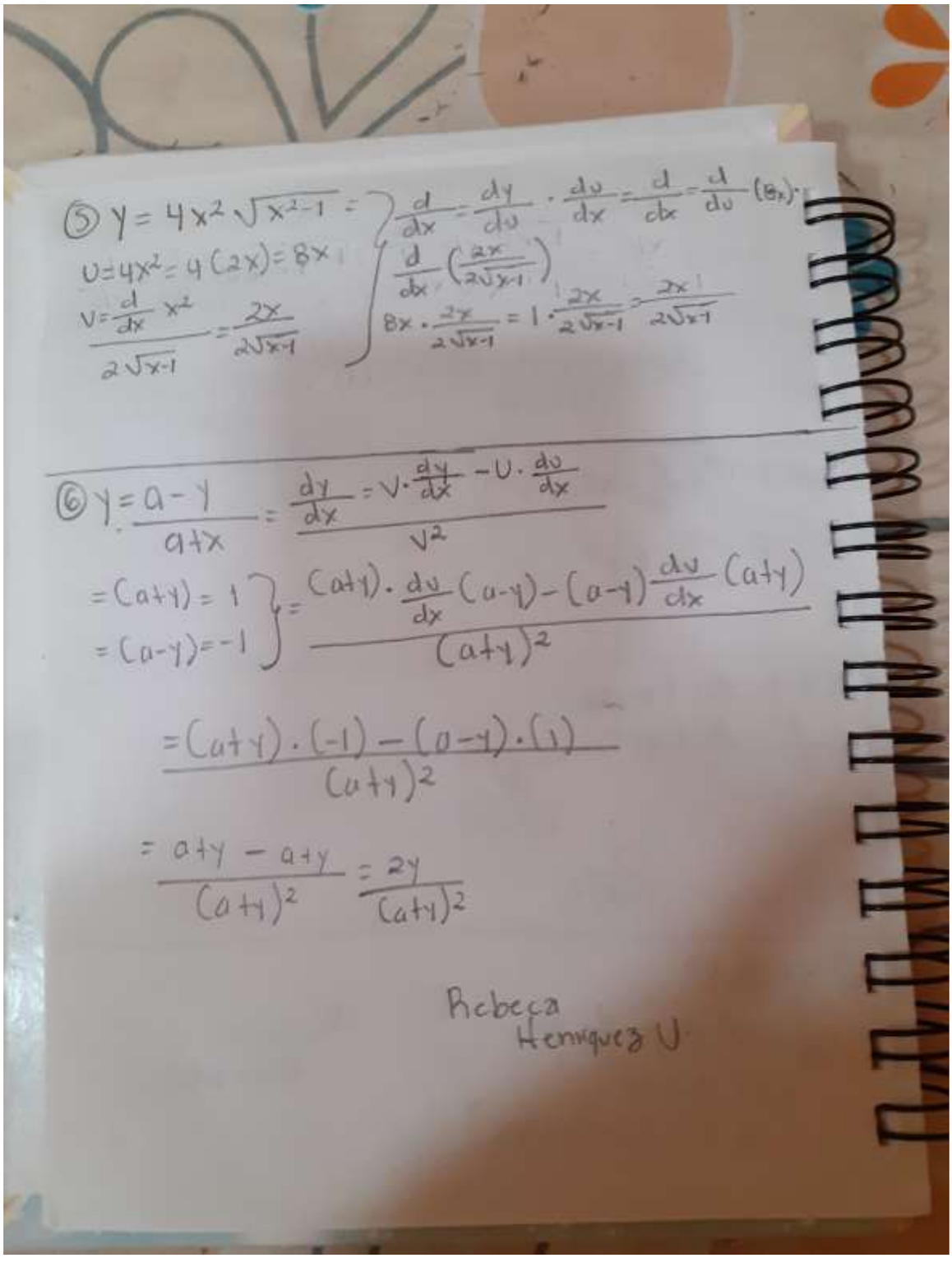
Nombre de la Materia: ***Biomatemáticas***

Nombre del profeso: ***Q.F.B. Leyber Martínez***

Nombre de la Licenciatura: ***Medicina Humana***

Semestre: ***2°***


① $Y = \frac{2-Y}{1+2x^2} = \frac{dy}{dx} = V \cdot \frac{dy}{dx} - U \frac{dv}{dx}$
V^2
$(2+y) = 1$
$(2-1) = -1$
$(2+y) \cdot \frac{dv}{dx} \frac{(2-y) - (2-y)}{(1+2x^2)} \frac{du}{dx} (2+y)$
$\frac{(2+y) \cdot (-1) - (2-y) \cdot (1)}{(1+2x^2)^2} = \frac{2y - 2+y}{(1+2x^2)}$
$= \frac{4y}{1+2x^2}$
② $Y = U^6 = \frac{d}{dv} x^n = nx^{n-1} =$
$6x^{6-1} = 6x^5$
③ $Y = \ln(ax+b)$
$\frac{d}{dx} = \ln(ax+b) = \frac{d}{dx}(ax+b)$
$(ax+b)$
$= \frac{1}{(ax+b)}$
④ $Y = \ln x^3$
$\frac{d}{dx} = x^3 \ln x \frac{d}{dx} 3x$
$= x^3 \ln(3)$
$= \ln x^3 \cdot 3 = (1.0986)$
Rebeca
Hornaxo


⑤ $y = 4x^2\sqrt{x^2-1}$ = $\frac{d}{dx} = \frac{dy}{du} \cdot \frac{du}{dx} = \frac{d}{dx} = \frac{d}{du}(8x)$
$u = 4x^2 = 4(2x) = 8x$
$v = \frac{d}{dx} x^2$
$\frac{2x}{2\sqrt{x-1}} = \frac{2x}{2\sqrt{x-1}}$
$\frac{d}{dx}\left(\frac{2x}{2\sqrt{x-1}}\right)$
$8x \cdot \frac{2x}{2\sqrt{x-1}} = 1 \cdot \frac{2x}{2\sqrt{x-1}} = \frac{2x}{2\sqrt{x-1}}$
⑥ $y = \frac{a-y}{a+x} = \frac{\frac{dy}{dx} = v \cdot \frac{dy}{dx} - u \cdot \frac{du}{dx}}{v^2}$
$= (a+y) = 1$
$= (a-y) = -1$
$= \frac{(a+y) \cdot \frac{du}{dx}(a-y) - (a-y)\frac{du}{dx}(a+y)}{(a+y)^2}$
$= \frac{(a+y) \cdot (-1) - (a-y) \cdot (1)}{(a+y)^2}$
$= \frac{a+y - a+y}{(a+y)^2} = \frac{2y}{(a+y)^2}$
Rebeca Henriquez U