1) $y = \sqrt{\cos\sqrt{\sin^2 x}}$

$u = \sqrt{\sin^2 x}$

$\quad = \sin x$

$\dfrac{du}{dx} = \cos x$

$y = \sqrt{\cos u} \qquad \Rightarrow \dfrac{dy}{du} = \dfrac{\sin u}{2\sqrt{\cos u}}$

$\Rightarrow \dfrac{dy}{du} \cdot \dfrac{du}{dx} = \dfrac{\cos(x) \cdot \sin(\sin(x))}{2\sqrt{\cos(\sin(x))}}$

2) $y = \cos^3(\sin 2x)$

$u = \sin 2x \qquad\qquad y = \cos^3 u$

$\dfrac{du}{dx} = 2\cos 2x \qquad\qquad \dfrac{dy}{du} = -3\cos^2 u \sin u$

$\Rightarrow \dfrac{dy}{du} \cdot \dfrac{du}{dx} = -3(\cos^2(\sin 2x))(\sin(\sin 2x)) \cdot (2\cos 2x)$

$\qquad\qquad\qquad = -6 \cos^2(\sin 2x) \cdot \sin(\sin 2x)\cos 2x$