(2) $$\frac{d}{dx}\left[\ln\left(x^2+\frac{1}{x}\right)\right] = \frac{1}{x^2+\frac{1}{x}}\frac{d}{dx}\left[x^2+\frac{1}{x}\right]$$

$$= \frac{2x-\frac{1}{x^2}}{x^2+\frac{1}{x}} = \frac{\frac{2x^3-1}{x^2}}{\frac{x^3+1}{x}} = \boxed{\frac{2x^3-1}{x(x^3+1)}}$$

(4) $$\frac{d}{dx}\left[\frac{1}{x^2+\ln(x)}\right] = \frac{d}{dx}\left[(x^2+\ln(x))^{-1}\right]$$

$$= -(x^2+\ln(x))^{-2}\left(2x+\frac{1}{x}\right) = \boxed{-\frac{2x+\frac{1}{x}}{(x^2+\ln(x))^2}}$$

(18) $$\frac{d}{dx}\left[\ln(\sin(x^3))\right] = \frac{1}{\sin(x^3)}\frac{d}{dx}\left[\sin(x^3)\right]$$

$$= \boxed{\frac{\cos(x^3)\,2x}{\sin(x^3)}} = \boxed{2x\cot(x^3)}$$