$$\operatorname{div} \hat{F} = \frac{d}{dx} \left( \frac{1}{2} x^{2} + e^{\cos 2x} \right) + \frac{d}{dx} (yx + \ln|z|) + \frac{d}{dx} + \operatorname{an}(xy)$$

$$= x + x + 0 = 2x$$