$\text{div}\mathbf{F} = 3y^2 + 0 + 3z^2$, so using cylindrical coordinates with $y = r\cos\theta$, $z = r\sin\theta$, $x = x$ we have

$$\begin{aligned}\iint_S \mathbf{F}\cdot d\mathbf{S} &= \iiint_E (3y^2 + 3z^2)\,dV \\ &= \int_0^{2\pi}\int_0^{3}\int_{-3}^{3}(3r^2\cos^2\theta + 3r^2\sin^2\theta)\,r\,dx\,dr\,d\theta \\ &= 3\int_0^{2\pi} d\theta\int_0^{3} r^3\,dr\int_{-3}^{3} dx = 3(2\pi)\left(\tfrac{81}{4}\right)(6) = 729\pi\end{aligned}$$