1. Let $W$ be the solid sphere of radius 2 centered at the origin with positively oriented boundary $S = \partial W$, i.e. outward normal vectors. Let $\mathbf{F} = \langle y^{2016}, \sin z^{2016}, 2016^x \rangle$, compute
\[ \iint_S \mathbf{F} \cdot d\mathbf{S}. \]

2. Let $W$ be the solid sphere of radius 2 centered at the origin with negatively oriented boundary $S = \partial W$, i.e. inward normal vectors. Let $\mathbf{F} = \langle x + y^{2016}, y + \sin z^{2016}, z + 2016^x \rangle$, compute
\[ \iint_S \mathbf{F} \cdot d\mathbf{S}. \]

3. Let $W$ be the solid sphere of radius 2 centered at the origin with positively oriented boundary $S = \partial W$, i.e. outward normal vectors. Let $\mathbf{F} = \langle 3x + y^{2016}, \sin z^{2016}, z^4 + 2016^x \rangle$, compute
\[ \iint_S \mathbf{F} \cdot d\mathbf{S}. \]