

The following formulas will appear on the exam as they are written here:

$$\oint_C \vec{F} \cdot \vec{n} \, ds = \int \int_R \nabla \cdot \vec{F} \, dA$$

$$\int \int_S \vec{F} \cdot \vec{n} \, d\sigma = \int \int \int_D \nabla \cdot \vec{F} \, dv$$

$$\oint_C \vec{F} \cdot d\vec{r} = \int \int_R (\nabla \times \vec{F}) \cdot \vec{k} \, dA$$

$$\oint_C \vec{F} \cdot d\vec{r} = \int \int_S (\nabla \times \vec{F}) \cdot \vec{n} \, d\sigma$$