

En formelsamling:

- Greens sats:

$$\iint_R \left(\frac{\partial F_2}{\partial x} - \frac{\partial F_1}{\partial y} \right) dA = \oint_{\gamma} \vec{F} \cdot d\vec{r}$$

- Stokes sats:

$$\iint_S (\text{Curl } \vec{F}) \cdot \vec{N} dS = \oint_{\gamma} \vec{F} \cdot d\vec{r}$$

- Gauss sats:

$$\iiint_D (\text{div } \vec{F}) dV = \oiint_S \vec{F} \cdot \vec{N} dS$$

- Gradienten, divergensen och rotationen i ett ortogonalt högerorienterat kroklinjärt koordinatsystem $[\hat{u}, \hat{v}, \hat{w}]$:

$$\nabla f = \frac{1}{h_u} \frac{\partial f}{\partial u} \hat{u} + \frac{1}{h_v} \frac{\partial f}{\partial v} \hat{v} + \frac{1}{h_w} \frac{\partial f}{\partial w} \hat{w}$$

$$\text{div } \vec{F} = \frac{1}{h_u h_v h_w} \left(\frac{\partial}{\partial u} (F_u h_v h_w) + \frac{\partial}{\partial v} (F_v h_u h_w) + \frac{\partial}{\partial w} (F_w h_u h_v) \right)$$

$$\text{Curl } \vec{F} = \frac{1}{h_u h_v h_w} \begin{vmatrix} h_u \hat{u} & h_v \hat{v} & h_w \hat{w} \\ \partial/\partial u & \partial/\partial v & \partial/\partial w \\ h_u F_u & h_v F_v & h_w F_w \end{vmatrix}$$

- Några trigonometriska värden och formler: $\sin(\pi/6) = \cos(\pi/3) = 1/2$, $\sin(\pi/3) = \cos(\pi/6) = \sqrt{3}/2$, $\sin(\pi/4) = \cos(\pi/4) = 1/\sqrt{2}$, $\sin 0 = \cos(\pi/2) = 0$, $\sin(\pi/2) = \cos 0 = 1$, $\sin \pi = 0$, $\cos \pi = -1$, $\sin^2 x + \cos^2 x = 1$, $\sin(2x) = 2 \sin x \cos x$, $\cos(2x) = 2 \cos^2 x - 1 = 1 - 2 \sin^2 x$.