```
> restart : with(VectorCalculus) : With(LinearAlgebra) :
> SetCoordinates(spherical[r, theta, phi]) :
> u := cos(theta)^3 - sin(theta)^3 :
> v_curl := VectorField([1, 1, 1]) :
> dr := VectorField([-sin(theta), cos(theta), 0]) :
> integrandum := u·v_curl • dr
```

$$integrandum := -\left(\cos(\theta)^3 - \sin(\theta)^3\right)\sin(\theta) + \left(\cos(\theta)^3 - \sin(\theta)^3\right)\cos(\theta) \quad (1)$$

```
> int(integrandum, theta = 0..2·Pi)
```

$$\frac{3\pi}{2} \quad (2)$$

```
>
```