```
> with(VectorCalculus):SetCoordinates(cartesian[x, y, z]):
> f := VectorField([x·(x^2 - y^2), -y·(x^2 - y^2), 0])
```

$$f := (x\,(x^2-y^2))\bar{e}_x + (-y\,(x^2-y^2))\bar{e}_y + (0)\bar{e}_z \tag{1}$$

```
> Curl(f)
```

$$(0)\bar{e}_x + (0)\bar{e}_y + (0)\bar{e}_z \tag{2}$$

```
> ScalarPotential(f)
```

$$\frac{(x^2-y^2)^2}{4} \tag{3}$$

```
>
```