

When $\mathbf{F}(x(t), y(t))$ in the expression

III Figure 12 shows the force field and the curve in Example 7. The work done is negative because the field impedes movement along the curve.

EXAMPLE 7
Particle along

SOLUTION Since

and

Therefore,

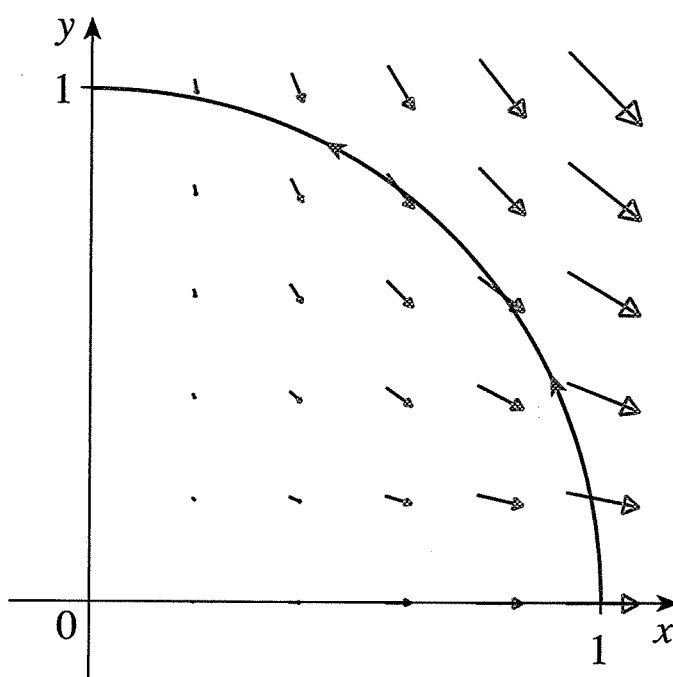


FIGURE 12

NOTE • The work is unchanged

because the

EXAMPLE 8
cubic given