Selected solutions for worksheets from Math 53 (U.C. Berkeley's multivariable calculus course).

## 25. Line Integrals

## Questions

2. 

Replacing $\mathbf{F}$ with $-\mathbf{F}$ changes each integral of $F_{i}$ to its negative.
3.

Replacing $C$ with $C^{\prime}$ changes each $\frac{d x_{i}}{d t}$ to its negative, so the whole thing is replaced with its negative.

## Problems

2. 

All are equal to $\sqrt{2}$.
3.

All are equal to 0 .

