MATH 261 Quiz 11 Name: .
Student number:

Show all work. 5 points each.

1. Evaluate the line integral $\int_C xy^4\,ds$ where C is the right half of the circle $x^2+y^2=16$ (see back of page for figure). Hint might try $t=\frac{-\pi}{2}..\frac{\pi}{2}$.

2. Evaluate the integral $\int_C \mathbf{F}\cdot d\mathbf{r}$ where $\mathbf{F}=\langle xy, 3y^2\rangle$ at $\mathbf{r}(t)=\langle 2t^4, t^3\rangle$ for $t=0..1$ (see back of page for figure).

Figure for problem 1

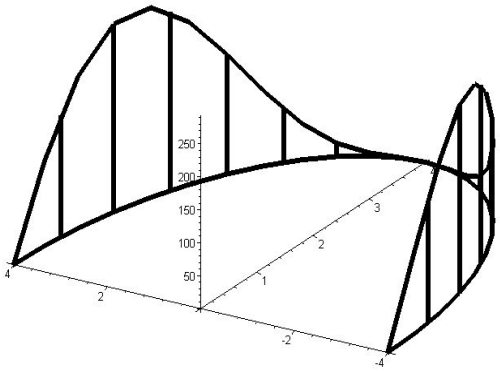

Figure for problem 2