

Answers to even-numbered problems of Homework 7

February 27, 2007

9.17

#8. $-3e^{6u}$.

#28. One possible transformation is $u = x/a$, $v = y/b$ and $w = z/c$. The answer is $\frac{4}{3}\pi abc$.

9.12

#16. $P = P(x)$ and $Q = Q(y)$, so $P_y = 0$ and $Q_x = 0$. So, the line integral along the curve evaluates to zero (by Green's Theorem).