Let $u = 5x$, $dv = \cos 4x\,dx \quad \Rightarrow \quad du = 5dx$, $v = \frac{1}{4}\sin 4x$. Then by Equation 2, $\int 5x\cos 4x\,dx = \frac{5}{4}x\sin 4x - \int \frac{5}{4}\sin 4x\,dx$
$= \frac{5}{4}x\sin 4x + \frac{5}{16}\cos 4x + C$.