

## Section 4: Integration by parts

### Exercise level 1

1. Using integration by parts, find

(i)  $\int xe^{2x} dx$

(ii)  $\int (1-2x)\sin x dx$

2. Evaluate

(i)  $\int_0^1 2xe^{-3x} dx$

(ii)  $\int_0^{\frac{\pi}{2}} (2x+1)\cos x dx$