26(ii) $\int x \cos\frac{x}{2}\,dx$

$u = x$ $\quad \frac{dv}{dx} = \cos\frac{x}{2}$

$\frac{du}{dx} = 1$ $\quad v = 2\sin\frac{x}{2}$

$\therefore \quad 2x\sin\frac{x}{2} - \int 2\sin\frac{x}{2}\,dx$

$= 2x\sin\frac{x}{2} + 4\cos\frac{x}{2} + C$

(2c)(i) $\int \frac{15x^2 - 4x}{5x^3 - 2x^2 + 5}\,dx$

$u = 5x^3 - 2x^2 + 5$

$\frac{du}{dx} = 15x^2 - 4x$

$\therefore \int f(x)\,dx = \ln(5x^3 - 2x^2 + 5) + C$

(ii) $\int \frac{7}{4x - 15}\,dx$ $\quad u = 4x - 15$

$\frac{du}{dx} = 4$

$= 7\int \frac{1}{4x - 15}$

$= \frac{7}{4}\ln(4x - 15) + C$