

## INTEGRALS OF THE TYPE $f'(x) (f(x))^n$

1 Find: (a)  $\int \sin x \cos^2 x dx$       (b)  $\int \tan x \sec^2 x dx$       (c)  $\int \sin x \cos^3 x dx$

## INTEGRALS OF THE TYPE $f'(x) (f(x))^n$

1 Find: (d)  $\int \cos x \sin^4 x dx$       (e)  $\int (1 + \cos 2x) \sin x dx$       (f)  $\int \sin x \cos x dx$

## INTEGRALS OF THE TYPE $f'(x) (f(x))^n$

2 Evaluate: (a)  $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \sin x \cos^3 x dx$       (c)  $\int_0^{\frac{\pi}{4}} \tan x \sec^2 x dx$

## INTEGRALS OF THE TYPE $f'(x) (f(x))^n$

2 Evaluate: (e)  $\int_0^{\pi} 2 \sin \theta \cos^2 \theta d\theta$

(f)  $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} \cos^2 \left(x - \frac{\pi}{4}\right) dx$