

2 The function f is defined by $f(x) = \frac{2}{(x+2)^2}$ for $x > -2$.

(a) Find $\int_1^{\infty} f(x) dx$. [3]

10 The function f is defined by $f(x) = (4x + 2)^{-2}$ for $x > -\frac{1}{2}$.

(a) Find $\int_1^{\infty} f(x) dx$. [4]

10 (a) Find $\int_1^{\infty} \frac{1}{(3x-2)^{\frac{3}{2}}} dx$. [4]