

1. Integrate the following:

a) $\int \frac{dx}{\sqrt{9x^2 + 12x - 5}}$

b) $\int \frac{(2x + 5)}{[3 - 4x - 4x^2]^{3/2}} dx$

c) $\int \frac{dx}{x^2 \sqrt{16x^2 - 9}}$

d) $\int \frac{4x-5}{[24x-16x^2]^{5/2}} dx$

e) $\int \sqrt{e^{2x} - 9} dx$

f) $\int \frac{1}{\sqrt{9x^2 + 12x - 5}} dx$