

$$b) \int \frac{11-3x}{(x+3)(x-1)} = \frac{A}{x+3} + \frac{B}{x-1} \quad ||-(9)$$

$$\frac{A+B}{(x+3)(x-1)} = \frac{A(x-1)+B(x+3)}{(x+3)(x-1)}$$

$$11-3x = A(x-1) + B(x+3)$$

$$x=1 \quad 8 = A(0) + B(4) \quad B=2 \quad B=2$$

$$x=-3 \quad 20 = A(-4) + B(0) \quad A=-5 \quad A=-5$$

$$\int \frac{11-3x}{x^2+2x-3} = \int \frac{-5}{x+3} + \frac{2}{x-1}$$

$$\int \frac{-5}{x+3} dx + \int \frac{2}{x-1} dx$$

$$= -5 \ln|x+3| - 2 \ln|x-1| + C$$

$$u = x+3 \quad v = x-1$$

$$= -5 \ln u - 2 \ln v + C$$