DCER. If sec(x) - tan(x) = 2 then what is $\int \sec(x) + \tan(x)$? We will use the difference of squares: $Sec^{2}(x) - tan^{2}(x) = (sec(x) - tan(x))(sec(x) + tan(x))$ Sec(x) - (an(x) $= Sec^2(x) - tan^2(x)$ 2 = given in question $sec^{2}(x) - tan^{2}(x) = \frac{1}{cos^{2}(x)} - \frac{sin^{2}(x)}{cos^{2}(x)}$ | defar of sec $= |-\sin^2(x)|$ |simplify |fractions C075(20) |Pythagorean |identify |Sin2(x)+cos2(h)=1 $= Col_{r}(x)$ $Cos^2(x)$ therefore $Sec(x) + tan(x) = \frac{1}{2}$