

B)

$$\int(x) = \frac{4}{x(1+4\ln(x))^2} dx \rightarrow ((4)/(x(1+4\ln(x))^2)) dx$$

$$\int \frac{4}{x(4\log(x)+1)^2} dx$$

$$4 \int \frac{1}{x(4\log(x)+1)^2} dx$$

$$[v = \log(x) \quad dv = \frac{1}{x} dx]$$

$$4 \int \frac{1}{(4v+1)^2} dv$$

$$[s = 4v+1, ds = 4dv]$$

$$\int \frac{1}{s^2} ds$$

$$-\frac{1}{s} + C$$

$$-\frac{1}{4v+1} + C$$

$$\frac{1}{-4\log(x)-1} + C$$