



Captain_____

You must show ALL steps [clearly identify your choices for bounds, u , $\frac{du}{dx}$]

1. $\int h'(12x) dx$

2. $\int_{-2}^2 2 f'(2x) dx$

3. $\int x^{1/2} \cos\left(x^{3/2}\right) dx$

$$4. \int_{-1}^2 \sqrt{5x+6} \, dx$$

$$5. \int (3x^2 + 7) \left[(x^3 + 7x)^5 \right] dx$$

$$6. \int_0^{\pi/2} \cos^3 x \sin x \, dx$$

7. $\int \frac{\cos \sqrt{x}}{\sqrt{x}} dx$

8. $\int_0^1 (x+1)(x^2 + 2x)^5 dx$

9. $\int \frac{g'(x)}{g^2(x)} dx$

10. $\int_0^{\pi/4} \tan^3 x \sec^2 x dx$

11. $\int x\sqrt{4x-1} dx$ where $u = 4x-1$

12. $\int_{10}^{17} (x-9)^{-2/3} dx$