

1. (a) $\int_0^2 x^3 dx$

(b) $\int_0^2 (5x+1)^3 dx$

2. (a) $\int_0^4 \sqrt{x} dx$

(b) $\int_0^5 \sqrt{3x+1} dx$

3. (a) $\int_1^8 \frac{1}{t^5} dt$

(b) $\int_1^8 \frac{1}{(6t+3)^5} dt$

4. (a) $\int_1^x \frac{3}{t} dt$

(b) $\int_1^x \frac{1}{4t-3} dt$

5. (a) $\int_{-4}^2 5e^x dx$

(b) $\int_{-4}^2 5e^{7x+3} dx$

6. (a) $\int_0^2 x^2 (x^3 + 7)^{10} dx$

(b) $\int_{-4}^2 5xe^{x^2-2} dx$

7. $\int_0^x 2t\sqrt{t^2+1} dt$

8. $\int_0^5 \frac{4x}{x^2+1} dx$