

1. (1 pt) Find

$$\int \frac{x^5}{\cos^2(x^6)} dx.$$

Answer(s) submitted:

- $(1/6) \tan(x^6)$

(correct)

2. (1 pt) Find

$$\int \frac{3}{\sqrt{3-9x^2}} dx.$$

Answer(s) submitted:

- $\sin^{-1}(\sqrt{3}x)$

(correct)

3. (1 pt) Find

$$\int \frac{4e^{1/x^5}}{x^6} dx.$$

Answer(s) submitted:

- $-(4/5)e^{1/(x^5)}$

(correct)

4. (1 pt) Find

$$\int \frac{e^{2x}}{9+36e^{4x}} dx.$$

Answer(s) submitted:

- $(1/36) \tan^{-1}(2e^{2x})$

(correct)

5. (1 pt) Find $\int x^4 \cos x^5 dx$. _____

Answer(s) submitted:

- $(1/5) \sin(x^5)$

(correct)

6. (1 pt)

Find

$$\int \frac{8^{\tan t}}{\cos^2 t} dt.$$

Answer(s) submitted:

- $(1/\ln 8) 8^{\tan t}$

(correct)

7. (1 pt)

Evaluate

$$\int_{t=1}^4 t^2 \sqrt{t^3-1} dt.$$

Answer(s) submitted:

- 111.121

(correct)

8. (1 pt)

Evaluate

$$\int_{x=4}^7 x^4 \sqrt{x^5+1024} dx.$$

Answer(s) submitted:

- 305112

(correct)

9. (1 pt)

Find $\int x \cos(4x) dx$. _____

Answer(s) submitted:

- $1/16 (4x \sin(4x) + \cos(4x))$

(correct)

10. (1 pt)

Calculate $\int_1^3 \ln 3x dx$.

Answer(s) submitted:

- 3.493

(correct)

11. (1 pt)

Find $\int \sin^{-1}(7x) dx$. _____

Answer(s) submitted:

- $1/7 [7x \sin^{-1}(7x) + \sqrt{1-(7x)^2}]$

(correct)

12. (1 pt)

Evaluate $\int_1^5 t^7 \ln(t) dt$.

Answer(s) submitted:

- 72482.325

(correct)

13. (1 pt)

Evaluate $\int x^2 \sin(x) dx$.

Answer(s) submitted:

- $-x^2 \cos x + 2x \sin x + 2 \cos x$

(correct)