

1. (1 point)

Evaluate the indefinite integral:

$$\int (x^3 + 9)^6 (3x^2) dx = \text{_____} + C.$$

Answer(s) submitted:

•

(incorrect)

2. (1 point) Evaluate the integral

$$\int x^3 (x^4 - 6)^6 dx,$$

by making the substitution $u = x^4 - 6$.

Answer: _____ + C.

NOTE: Your answer should be in terms of x and not u .

Answer(s) submitted:

•

(incorrect)

3. (1 point) Evaluate the following indefinite integral using the substitution $u = 5x + 1$.

$$\int \frac{-22}{(5x + 1)^6} dx = \text{_____}$$

Answer(s) submitted:

•

(incorrect)

4. (1 point) Evaluate the indefinite integral.

$$\int \frac{x^2}{x^3 + 1} dx$$

Answer: _____ + C

Answer(s) submitted:

•

(incorrect)

5. (1 point)

Evaluate the indefinite integral.

$$\int \frac{4x - 1}{(4x^2 - 2x + 6)^6} dx$$

Answer = _____ + C

Answer(s) submitted:

•

(incorrect)

6. (1 point)

Evaluate the indefinite integral.

$$\int \frac{x + 2}{x^2 + 4x + 5} dx$$

Answer: _____ + C

Answer(s) submitted:

•

(incorrect)

7. (1 point) Evaluate the indefinite integral.

$$\int x^3 \sqrt{5 + x^4} dx$$

Answer: _____ + C

Answer(s) submitted:

•

(incorrect)

8. (1 point) Find the following indefinite integrals.

$$\int \frac{x}{\sqrt{x + 3}} dx = \text{_____} + C$$

Answer(s) submitted:

•

(incorrect)

9. (1 point) Evaluate the integral by making the given substitution.

$$\int \sec(4x) \tan(4x) dx, \quad u = 4x$$

Answer: _____ + C

Answer(s) submitted:

•

(incorrect)

10. (1 point) Evaluate the indefinite integral.

$$\int \tan(x) dx = \text{_____} + C.$$

Hint: write $\tan(x) = \frac{\sin(x)}{\cos(x)}$

Answer(s) submitted:

•

(incorrect)

11. (1 point) Evaluate the indefinite integral.

$$\int \frac{\cos x}{4 \sin x + 20} dx$$

_____ +C
Answer(s) submitted:

•
(incorrect)

12. (1 point)
Evaluate the indefinite integral

$$\int -5 \sin^3(x) \cos(x) dx$$

_____ +C
Answer(s) submitted:

•
(incorrect)

13. (1 point)
Evaluate the indefinite integral

$$\int 6 \tan^2(x) \sec^2(x) dx$$

_____ +C
Answer(s) submitted:

•
(incorrect)

14. (1 point) Evaluate the indefinite integral.

$$\int x^2 e^{x^3} dx$$

Answer = _____ +C
Answer(s) submitted:

•
(incorrect)

15. (1 point)
Evaluate the indefinite integral

$$\int e^x \sqrt{10 + e^x} dx$$

_____ +C
Answer(s) submitted:

•
(incorrect)

16. (1 point)
Evaluate the indefinite integral

$$\int 8e^{\cos(t)} \sin(t) dt$$

_____ +C
Answer(s) submitted:

•
(incorrect)

17. (1 point) Evaluate the indefinite integral.

$$\int 2e^{2x} \sin(e^{2x}) dx = \underline{\hspace{2cm}}$$

Answer(s) submitted:

•
(incorrect)

18. (1 point)
Evaluate the indefinite integral

$$\int \frac{-8(\ln(x))^2}{x} dx$$

_____ +C
Answer(s) submitted:

•
(incorrect)

19. (1 point) $\int \frac{1}{x^2 + 8x + 97} dx = \underline{\hspace{2cm}}$ +C

WeBWorK notation for $\sin^{-1}(x)$ is arcsin(x) or asin(x), for $\tan^{-1}(x)$ it's arctan(x) or atan(x).

Answer(s) submitted:

•
(incorrect)

20. (1 point) $\int \frac{1}{\sqrt{25-81x^2}} dx = \underline{\hspace{2cm}}$ +C

WeBWorK notation for $\sin^{-1}(x)$ is arcsin(x) or asin(x), for $\tan^{-1}(x)$ it's arctan(x) or atan(x).

Answer(s) submitted:

•
(incorrect)

21. (1 point)
Evaluate the definite integral.

$$\int_0^5 \cos(\pi x) dx$$

Answer: _____
Answer(s) submitted:

•
(incorrect)

22. (1 point)

Evaluate the definite integral:

$$\int_0^{\sqrt{\pi}} 5x \cos(x^2) dx$$

Answer(s) submitted:

•

(incorrect)

23. (1 point)

Evaluate the definite integral:

$$\int_0^{\pi} 4 \sec^2(t/4) dt$$

Answer(s) submitted:

•

(incorrect)

24. (1 point)

Evaluate the definite integral:

$$\int_e^{e^4} \frac{3}{x \sqrt{\ln(x)}} dx$$

Answer(s) submitted:

•

(incorrect)

25. (1 point)

Evaluate the definite integral.

$$\int_0^8 xe^{-x^2} dx$$

Answer: _____

Answer(s) submitted:

•

(incorrect)