SASKATCHEWAN CALCULUS 30 · UNIT E

Derivatives of Transcendental Functions — Practice Test

Saskatchewan Calculus 30 • 25 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The derivative of cos 3x is**

- A -3sin 3x
- B 3sin 3x
- C sin 3x
- D -3cos 3x

Understand It with Pulse | Flag a mistake

2 **The derivative of sin 3x is**

- **A** cos 3x
- **B** 3cos 3x
- **C** 3sin 3x
- **D** -cos 3x

Understand It with Pulse | Flag a mistake

3 **The derivative of ln x is**

- **A** $\frac{1}{x}$
- **B** x
- **C** ln x
- **D** 1

Understand It with Pulse | Flag a mistake

4 **The derivative of e^x is**

- A e^x
- B $x\ e^x$
- C e^{x-1}
- D 1

Understand It with Pulse | Flag a mistake

5 **The derivative of 6cos x is**

- A 6sin x
- B -6sin x
- C sin x
- D -6cos x

Understand It with Pulse | Flag a mistake

6 **The derivative of sin x is**

- **A** -cos x
- **B** sin x
- **C** cos x
- **D** -sin x

Understand It with Pulse | Flag a mistake

7 **The derivative of ln 4x is**

- **A** $\frac{1}{x}$
- **B** $\frac{4}{x}$
- **C** $\frac{1}{4x}$
- **D** x

Understand It with Pulse | Flag a mistake

8 **The derivative of e^{3x} is**

- A e^{3x}
- B $3e^{x}$
- C e^{3}
- D $3e^{3x}$

Understand It with Pulse | Flag a mistake

9 **The derivative of cos x is**

- A sin x
- B cos x
- C -sin x
- D -cos x

Understand It with Pulse | Flag a mistake

10 **The derivative of 7sin x is**

- **A** cos x
- **B** 7sin x
- **C** -7cos x
- **D** 7cos x

Understand It with Pulse | Flag a mistake

11 **The derivative of ln 8x is**

- **A** $\frac{8}{x}$
- **B** $\frac{1}{8x}$
- **C** x
- **D** $\frac{1}{x}$

Understand It with Pulse | Flag a mistake

12 **The derivative of e^{5x} is**

- A e^{5x}
- B $5e^{x}$
- C $5e^{5x}$
- D e^{5}

Understand It with Pulse | Flag a mistake

13 **The derivative of cos 4x is**

- A 4sin 4x
- B sin 4x
- C -4cos 4x
- D -4sin 4x

Understand It with Pulse | Flag a mistake

14 **The derivative of sin 4x is**

- **A** cos 4x
- **B** 4sin 4x
- **C** -cos 4x
- **D** 4cos 4x

Understand It with Pulse | Flag a mistake

15 **The derivative of ln 9x is**

- **A** $\frac{1}{x}$
- **B** $\frac{9}{x}$
- **C** $\frac{1}{9x}$
- **D** x

Understand It with Pulse | Flag a mistake

16 **The derivative of 4cos x is**

A 4sin x

B -4sin x

C sin x

D -4cos x

Understand It with Pulse | Flag a mistake

17 **The derivative of 3sin x is**

A cos x

B 3cos x

C 3sin x

D -3cos x

Understand It with Pulse | Flag a mistake

18 **The derivative of ln 2x is**

- **A** $\frac{2}{x}$
- **B** $\frac{1}{x}$
- **C** $\frac{1}{2x}$
- **D** x

Understand It with Pulse | Flag a mistake

19 **The derivative of 8cos x is**

- **A** -8sin x
- **B** 8sin x
- **C** sin x
- **D** -8cos x

Understand It with Pulse | Flag a mistake

20 **The derivative of 5sin x is**

A cos x

B 5sin x

C 5cos x

D -5cos x

Understand It with Pulse | Flag a mistake

21 **The derivative of 7cos x is**

A 7sin x

B -7sin x

C sin x

D -7cos x

Understand It with Pulse | Flag a mistake

22 **The derivative of 8sin x is**

A cos x

B 8sin x

C 8cos x

D -8cos x

Understand It with Pulse | Flag a mistake

23 **The derivative of 2cos x is**

A 2sin x

B sin x

C -2sin x

D -2cos x

Understand It with Pulse | Flag a mistake

24 **The derivative of sin 8x is**

- A 8cos 8x
- B cos 8x
- C 8sin 8x
- D -cos 8x

Understand It with Pulse | Flag a mistake

25 **The derivative of 5cos x is**

- A 5sin x
- B -5sin x
- C sin x
- D -5cos x

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**10.**	D	**19.**	A
2.	B	**11.**	D	**20.**	C
3.	A	**12.**	C	**21.**	B
4.	A	**13.**	D	**22.**	C
5.	B	**14.**	D	**23.**	C
6.	C	**15.**	A	**24.**	A
7.	A	**16.**	B	**25.**	B
8.	D	**17.**	B		
9.	C	**18.**	B		

© 2026 Brett Robbins. All Rights Reserved.