NEWFOUNDLAND AND LABRADOR MATHEMATICS 3208 · UNIT A · 25 QUESTIONS

Limits and Continuity — Practice Test

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 $\lim_{x \to 3} (2x + 1)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

2 $\lim_{x \to 5} (2x + 1)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

3 $\lim_{x \to 2} (2x + 1)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

4 $\lim_{x \to 7} (2x + 1)$ is

ANSWER _____

Understand It with Pulse | Flag a mistake

5 $\lim_{x \to 4} x^2 - 16/x - 4$ is

ANSWER

Understand It with Pulse | Flag a mistake

6 $\lim_{x \to 6} \frac{x^2 - 36}{x - 6}$ is

ANSWER

Understand It with Pulse | Flag a mistake

7 $\lim_{x \to 3} \frac{x^2 - 9}{x - 3}$ is

ANSWER

Understand It with Pulse | Flag a mistake

8 $\lim_{x \to 5} \frac{x^2 - 25}{x - 5}$ is

ANSWER

Understand It with Pulse | Flag a mistake

9 $\lim_{x \to 2} x^2 - 4/x - 2$ is



A 8

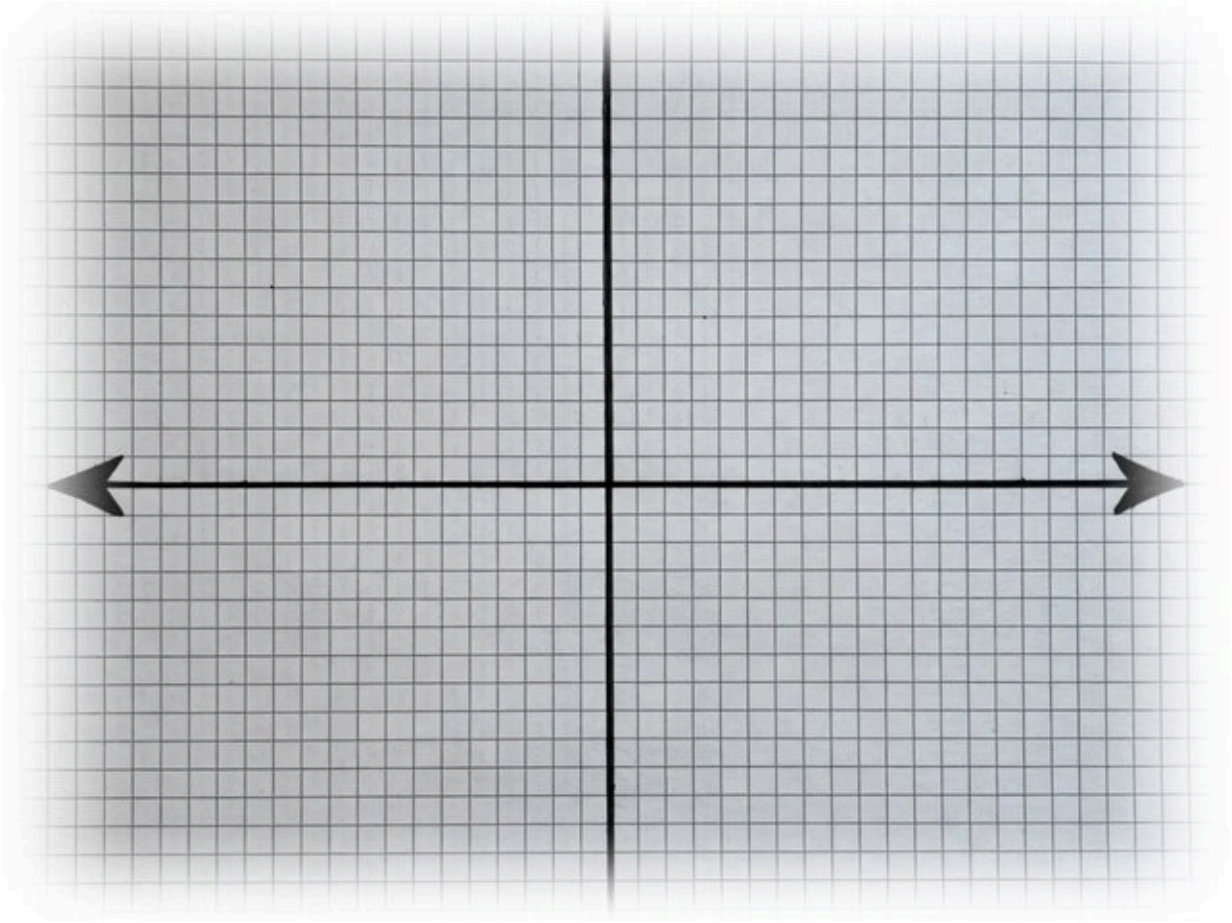
B 2

C 4

D 0

Understand It with Pulse | Flag a mistake

10 $\lim_{x \to 4} \frac{\sqrt{x} - 2}{x - 4}$ is



A $\frac{1}{4}$

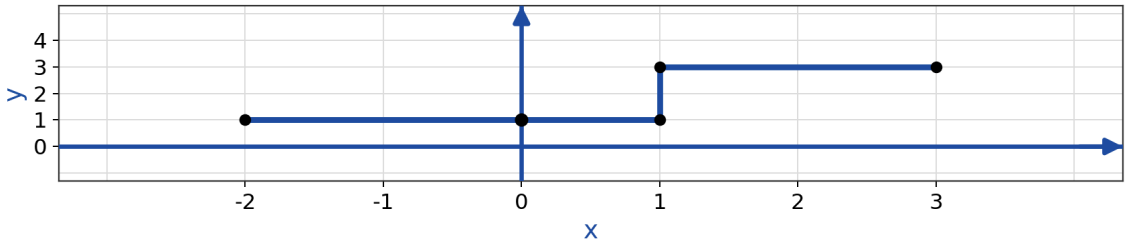
B $\frac{1}{2}$

C 4

D 0

Understand It with Pulse | Flag a mistake

11 **The graph shows a function with a jump at x = 1 . The left hand limit at x = 1 is**



A 1

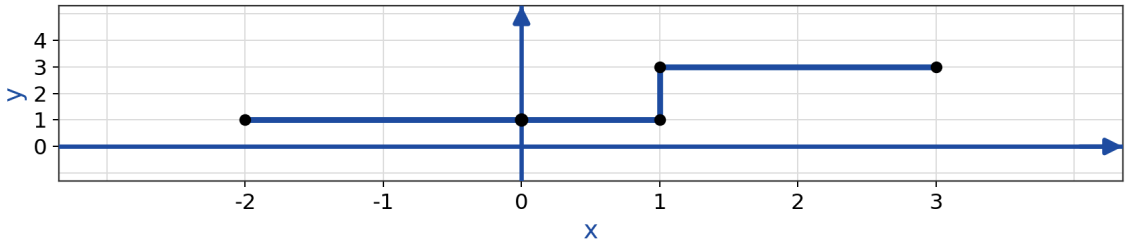
B 3

C 2

D does not exist

Understand It with Pulse | Flag a mistake

12 **The graph shows a function with a jump at x = 1 . The right hand limit at x = 1 is**



A 1

B 3

C 2

D does not exist

Understand It with Pulse | Flag a mistake

13 $\lim_{x \to \infty} \frac{5x^2 - 1}{2x^2 + 3}$ is



A $\frac{5}{2}$

B $\frac{2}{5}$

C 5

D 0

Understand It with Pulse | Flag a mistake

14 $\lim_{x \to \infty} \frac{4x^2 - 1}{2x^2 + 3}$ is

A $\frac{2}{4}$

B $\frac{4}{2}$

C 4

D 0

Understand It with Pulse | Flag a mistake

15 $\lim_{x \to \infty} \frac{7x^2 - 1}{3x^2 + 3}$ is

A $\frac{3}{7}$

B 7

C $\frac{7}{3}$

D 0

Understand It with Pulse | Flag a mistake

16 $\lim_{x \to \infty} \frac{3x - 1}{x^2 + 3}$ is

ANSWER

Understand It with Pulse | Flag a mistake

17 $\lim_{x \to \infty} \frac{5x - 1}{x^2 + 3}$ is

ANSWER

Understand It with Pulse | Flag a mistake

18 $\lim_{x \to 0} \frac{\sin x}{x}$ is



A 1

B 0

C ∞

D does not exist

Understand It with Pulse | Flag a mistake

19 $\lim_{x \to 0} \frac{|x|}{x}$ is

A 1

B does not exist

C -1

D 0

Understand It with Pulse | Flag a mistake

20 The function $f(x) = \frac{1}{x - 2}$ has a vertical asymptote at



A x = 0

B x = -2

C x = 2

D y = 2

Understand It with Pulse | Flag a mistake

21 The function $f(x) = \frac{3x}{x + 1}$ has a horizontal asymptote at



A y = 0

B y = 1

C x = -1

D y = 3

Understand It with Pulse | Flag a mistake

22 **A function with a jump at x = 2 is at x = 2**

A discontinuous

B continuous

C differentiable

D constant

Understand It with Pulse | Flag a mistake

23 **A removable discontinuity occurs where a function has a**

A jump in its graph

B hole in its graph

C vertical asymptote

D corner

Understand It with Pulse | Flag a mistake

24 $\lim_{x \to 2} (x^2 - 3x + 2)$ is

ANSWER

Understand It with Pulse | Flag a mistake

25 $\lim_{x \to 4} (x^2 - 3x + 2)$ is

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	7	**10.**	A	**19.**	B
2.	11	**11.**	A	**20.**	C
3.	5	**12.**	B	**21.**	D
4.	15	**13.**	A	**22.**	A
5.	8	**14.**	B	**23.**	B
6.	12	**15.**	C	**24.**	0
7.	6	**16.**	0	**25.**	6
8.	10	**17.**	0		
9.	C	**18.**	A		

© 2026 Brett Robbins. All Rights Reserved.