DELAWARE PRECALCULUS · UNIT 4 · 25 QUESTIONS

Limits, Sequences, and Series — 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 **Find the limit as x approaches 3 of $\frac{x^2 - 9}{x - 3}$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **Find the sum of the first 4 terms of an arithmetic series with first term 4 and common difference 3.**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An arithmetic sequence starts with 1 and has common difference 3. The 7 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A geometric sequence starts with 1 and has common ratio 2. The 4 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Find the limit as x approaches -1 of $1x^2 + 3$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Find the limit as x approaches 4 of $\frac{x^2 - 16}{x - 4}$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Find the sum of the first 6 terms of an arithmetic series with first term 1 and common difference 3.**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **An arithmetic sequence starts with 7 and has common difference 3. The 6 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A geometric sequence starts with 2 and has common ratio 3. The 5 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Find the limit as x approaches -1 of $2x^2 + 3$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **Find the limit as x approaches 5 of $\frac{x^2 - 25}{x - 5}$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **Find the sum of the first 5 terms of an arithmetic series with first term 1 and common difference 2.**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **An arithmetic sequence starts with 5 and has common difference 4. The 8 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **A geometric sequence starts with 3 and has common ratio 3. The 4 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **Find the limit as x approaches 1 of $3x^2 + 3$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **Find the sum of the first 5 terms of an arithmetic series with first term 2 and common difference 3.**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **An arithmetic sequence starts with 7 and has common difference 2. The 5 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A geometric sequence starts with 1 and has common ratio 3. The 5 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **Find the limit as x approaches 0 of $1x^2 + 3$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **Find the sum of the first 5 terms of an arithmetic series with first term 2 and common difference 2.**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **An arithmetic sequence starts with 3 and has common difference 4. The 6 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A geometric sequence starts with 2 and has common ratio 3. The 4 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **Find the limit as x approaches -2 of $1x^2 + 3$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **Find the sum of the first 4 terms of an arithmetic series with first term 1 and common difference 2.**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **An arithmetic sequence starts with 8 and has common difference 3. The 5 term is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 6
2. 34
3. 19
4. 8
5. 4
6. 8
7. 51
8. 22
9. 162
10. 5
11. 10
12. 25
13. 33
14. 81
15. 6
16. 40
17. 15
18. 81
19. 3
20. 30
21. 23
22. 54
23. 7
24. 16
25. 20

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