

Д.з. 18а. Найти формулу для $y^{(2n+1)}$.

1. $y = \cos(2x + 5)$

2. $y = \sin(2x - 3)$

3. $y = \cos(3x + 5)$

4. $y = \sin(3x - 3)$

5. $y = \cos(4x + 5)$

6. $y = \sin(4x - 3)$

7. $y = \cos(5x + 5)$

8. $y = \sin(5x - 3)$

9. $y = \cos(2x - 5)$

10. $y = \sin(2x + 3)$

11. $y = \cos(3x - 5)$

12. $y = \sin(3x + 3)$

13. $y = \cos(4x - 5)$

14. $y = \sin(4x + 3)$

15. $y = \cos(5x - 5)$

16. $y = \sin(5x + 3)$

17. $y = \cos(2x + 6)$

18. $y = \sin(2x - 4)$

19. $y = \cos(3x + 6)$

20. $y = \sin(3x - 4)$

21. $y = \cos(4x + 6)$

22. $y = \sin(4x - 4)$

23. $y = \cos(5x + 6)$

24. $y = \sin(5x - 4)$

25. $y = \cos(2x + 2)$

26. $y = \sin(2x - 1)$

27. $y = \cos(3x + 2)$

28. $y = \sin(3x - 1)$

29. $y = \cos(4x + 2)$

30. $y = \sin(4x - 1)$

31. $y = \cos(5x + 2)$

32. $y = \sin(5x - 1)$

Д.з. 186. Найти y'' в точке M_0 .

1. $\frac{(x-1)^2}{25} + \frac{(y+2)^2}{100} = 1, M_0(-2, 6)$
2. $\frac{(x+1)^2}{100} + \frac{(y-2)^2}{25} = 1, M_0(7, 5)$
3. $\frac{(x+1)^2}{25} + \frac{(y+2)^2}{100} = 1, M_0(3, 4)$
4. $\frac{(x-1)^2}{100} + \frac{(y-2)^2}{25} = 1, M_0(7, 6)$
5. $\frac{(x-2)^2}{25} + \frac{(y+1)^2}{100} = 1, M_0(-2, -7)$
6. $\frac{(x+2)^2}{100} + \frac{(y-1)^2}{25} = 1, M_0(-8, 5)$
7. $\frac{(x+2)^2}{25} + \frac{(y+1)^2}{100} = 1, M_0(-5, -9)$
8. $\frac{(x-2)^2}{100} + \frac{(y-1)^2}{25} = 1, M_0(-6, 4)$
9. $\frac{(x+1)^2}{25} + \frac{(y+2)^2}{100} = 1, M_0(-4, 6)$
10. $\frac{(x-1)^2}{100} + \frac{(y-2)^2}{25} = 1, M_0(9, 5)$
11. $\frac{(x-1)^2}{25} + \frac{(y+2)^2}{100} = 1, M_0(5, 4)$
12. $\frac{(x+1)^2}{100} + \frac{(y-2)^2}{25} = 1, M_0(5, 6)$
13. $\frac{(x+2)^2}{25} + \frac{(y+1)^2}{100} = 1, M_0(-6, -7)$
14. $\frac{(x-2)^2}{100} + \frac{(y-1)^2}{25} = 1, M_0(-4, 5)$
15. $\frac{(x-2)^2}{25} + \frac{(y+1)^2}{100} = 1, M_0(-1, -9)$
16. $\frac{(x+2)^2}{100} + \frac{(y-1)^2}{25} = 1, M_0(-10, 4)$
17. $\frac{(x-1)^2}{25} + \frac{(y-2)^2}{100} = 1, M_0(-2, 10)$
18. $\frac{(x+1)^2}{100} + \frac{(y+2)^2}{25} = 1, M_0(7, 1)$
19. $\frac{(x+1)^2}{25} + \frac{(y-2)^2}{100} = 1, M_0(3, 8)$
20. $\frac{(x-1)^2}{100} + \frac{(y+2)^2}{25} = 1, M_0(7, 2)$
21. $\frac{(x-2)^2}{25} + \frac{(y-1)^2}{100} = 1, M_0(-2, -5)$
22. $\frac{(x+2)^2}{100} + \frac{(y+1)^2}{25} = 1, M_0(-8, 7)$
23. $\frac{(x+2)^2}{25} + \frac{(y-1)^2}{100} = 1, M_0(-5, -7)$
24. $\frac{(x-2)^2}{100} + \frac{(y+1)^2}{25} = 1, M_0(-6, 2)$
25. $\frac{(x+1)^2}{25} + \frac{(y-2)^2}{100} = 1, M_0(-4, 10)$
26. $\frac{(x-1)^2}{100} + \frac{(y+2)^2}{25} = 1, M_0(9, 1)$
27. $\frac{(x-1)^2}{25} + \frac{(y-2)^2}{100} = 1, M_0(5, 8)$
28. $\frac{(x+1)^2}{100} + \frac{(y+2)^2}{25} = 1, M_0(5, 2)$
29. $\frac{(x+2)^2}{25} + \frac{(y-1)^2}{100} = 1, M_0(-6, -5)$
30. $\frac{(x-2)^2}{100} + \frac{(y+1)^2}{25} = 1, M_0(-4, 7)$
31. $\frac{(x-2)^2}{25} + \frac{(y-1)^2}{100} = 1, M_0(-1, -7)$
32. $\frac{(x+2)^2}{100} + \frac{(y+1)^2}{25} = 1, M_0(-10, 2)$

Д.з. 18в. Найти $y''_{xx}(t_0)$.

1. $x = 1 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
2. $x = -2 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
3. $x = -1 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
4. $x = 2 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
5. $x = 2 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
6. $x = -1 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
7. $x = 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
8. $x = 3 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
9. $x = 3 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
10. $x = \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
11. $x = 1 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
12. $x = 4 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
13. $x = 4 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
14. $x = 1 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
15. $x = 2 + 2\sqrt{2}\cos t, y = -2 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
16. $x = 5 + \sqrt{2}\cos t, y = 1 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
17. $x = 1 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
18. $x = -2 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
19. $x = -1 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
20. $x = 2 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
21. $x = 2 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
22. $x = -1 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
23. $x = 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
24. $x = 3 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
25. $x = 3 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
26. $x = \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
27. $x = 1 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
28. $x = 4 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$
29. $x = 4 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = -\frac{3\pi}{4}$
30. $x = 1 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = -\frac{\pi}{4}$
31. $x = 2 + 2\sqrt{2}\cos t, y = -1 + \sqrt{2}\sin t, t_0 = \frac{3\pi}{4}$
32. $x = 5 + \sqrt{2}\cos t, y = 2 + 2\sqrt{2}\sin t, t_0 = \frac{\pi}{4}$