

Отраженное поле

Исследуются установившиеся гармонические колебания упругого слоя толщиной $h = 1$ на полупространстве. Нагрузка $\mathbf{Q}(x) = (0, 1)$. Пусть $\mathbf{u} = (u, w)$ - отраженное поле перемещений.

Свойства слоев: $c_{p,1} = 1, c_{p,2} = 2, c_{s,1} = 0.3, c_{s,2} = 0.5, \rho_1 = 1, \rho_2 = 2$.

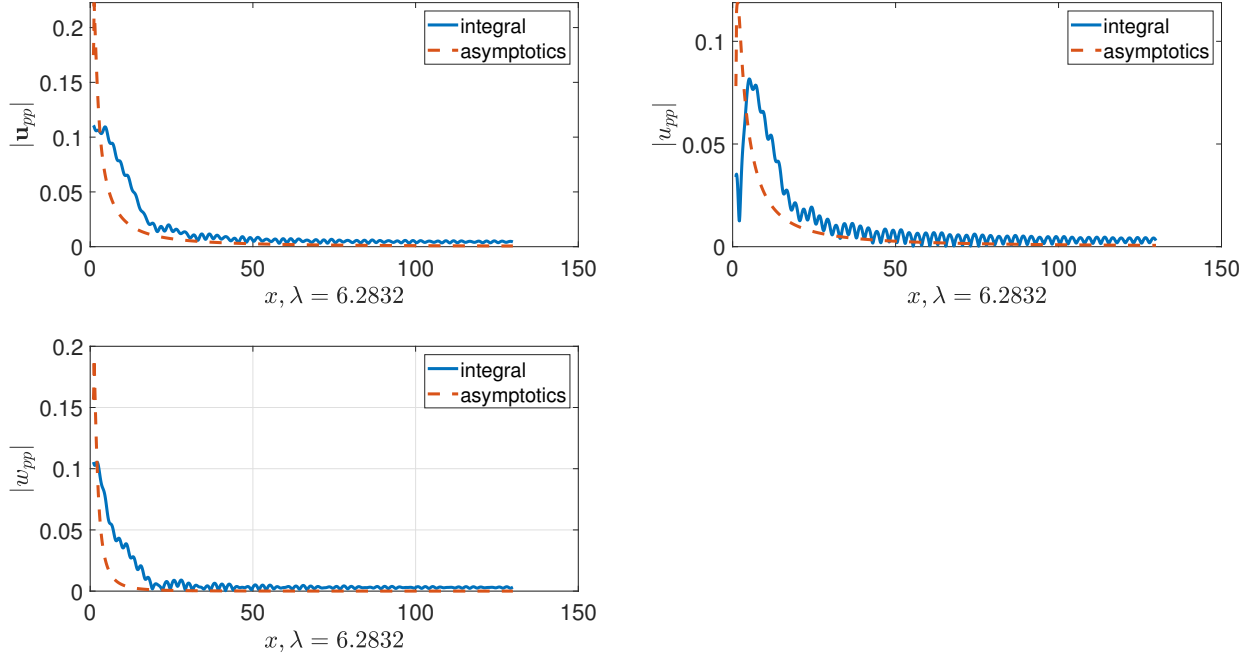


Рис. 1. $\omega = 1, \lambda = 6.28$

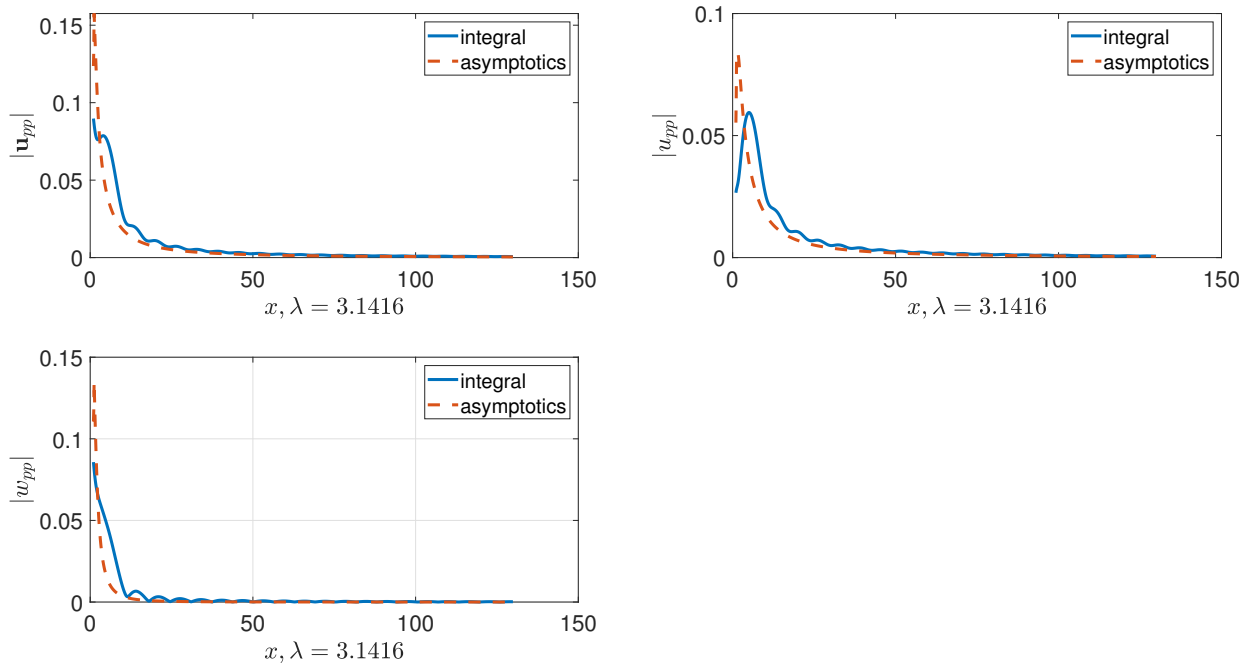
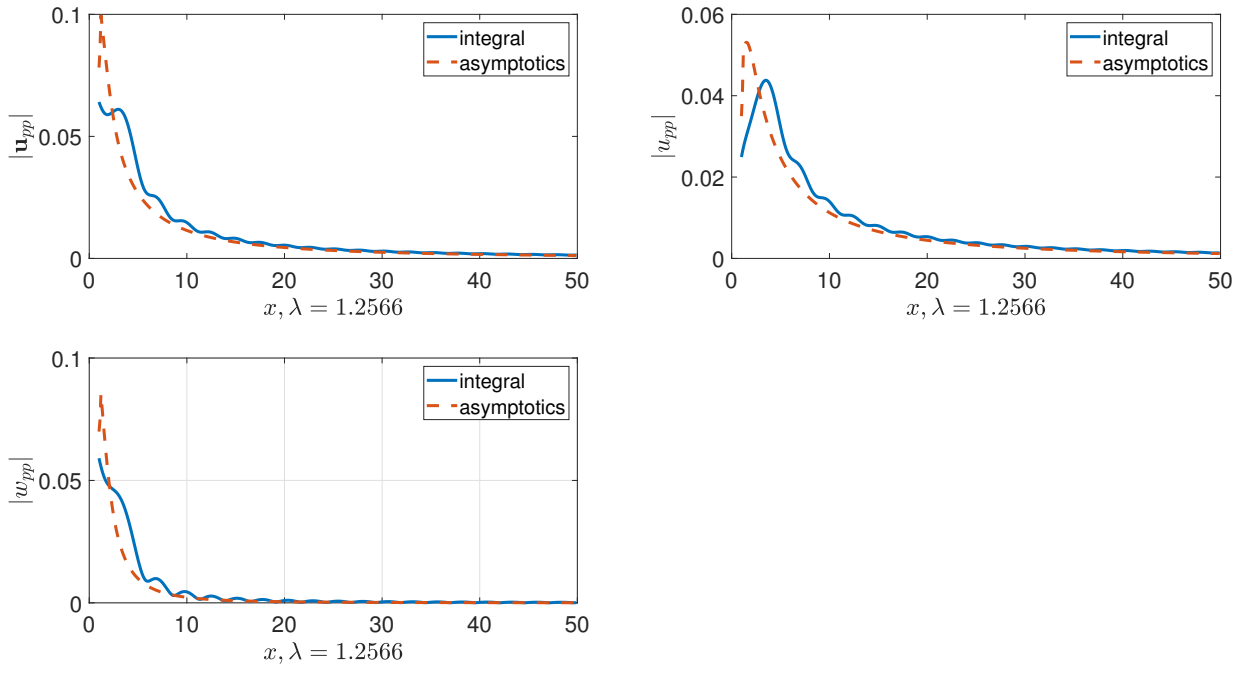
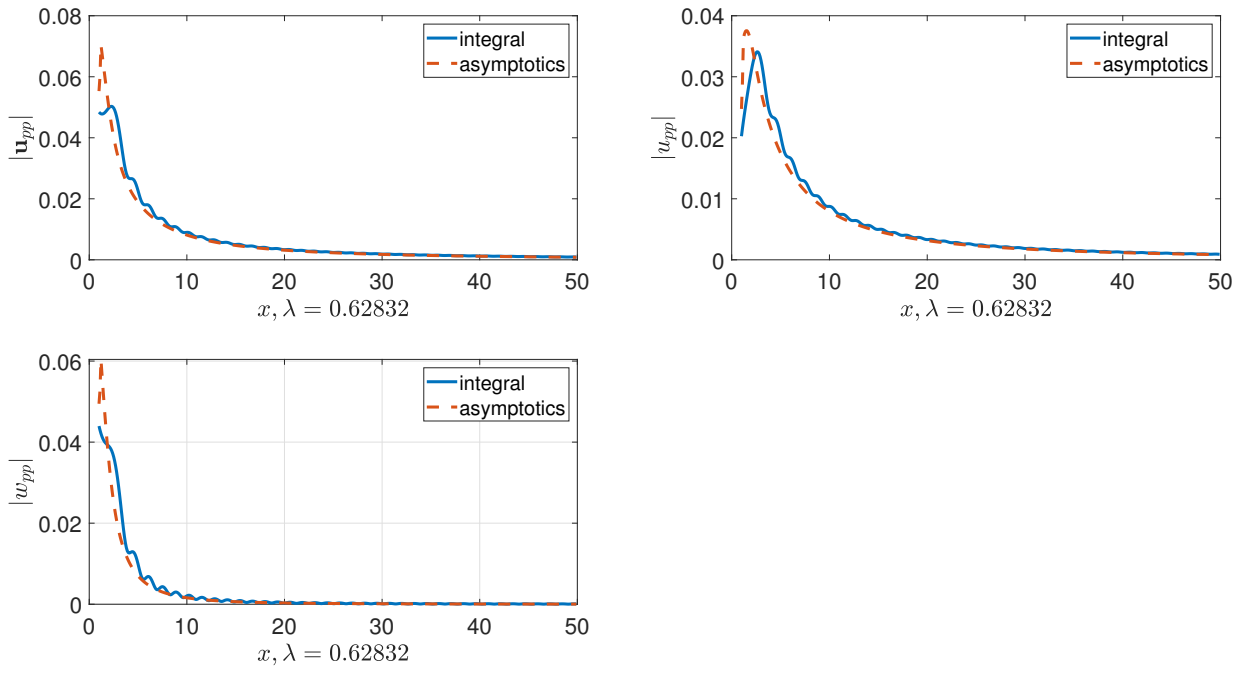
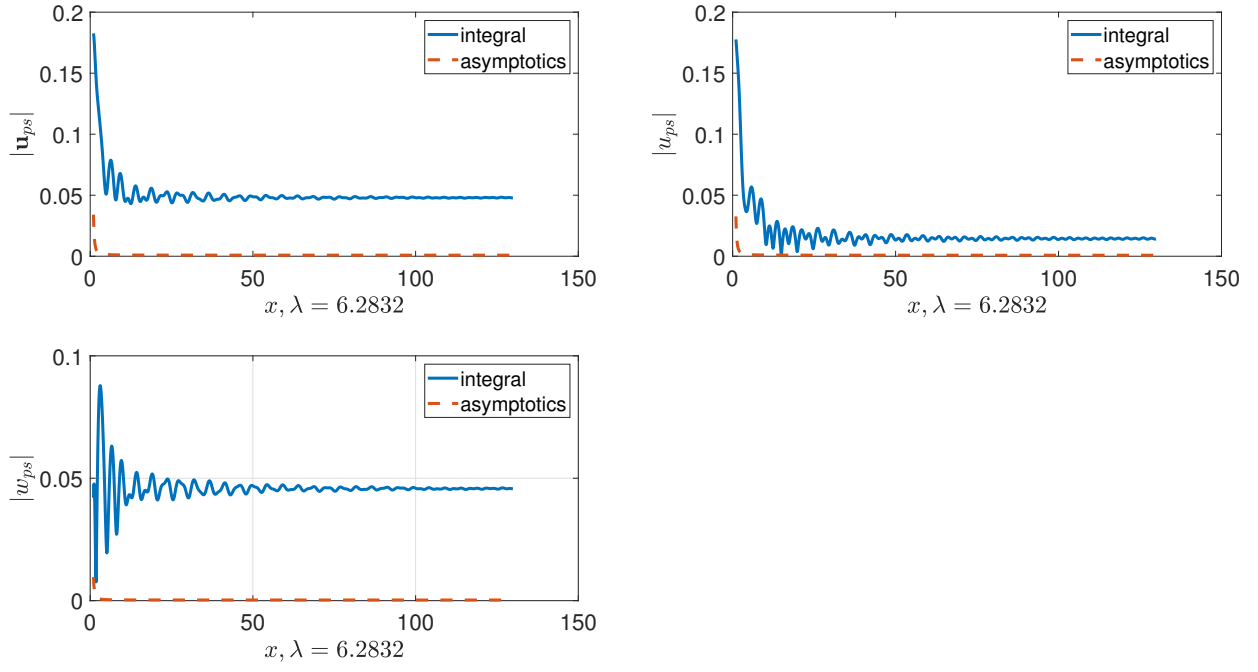
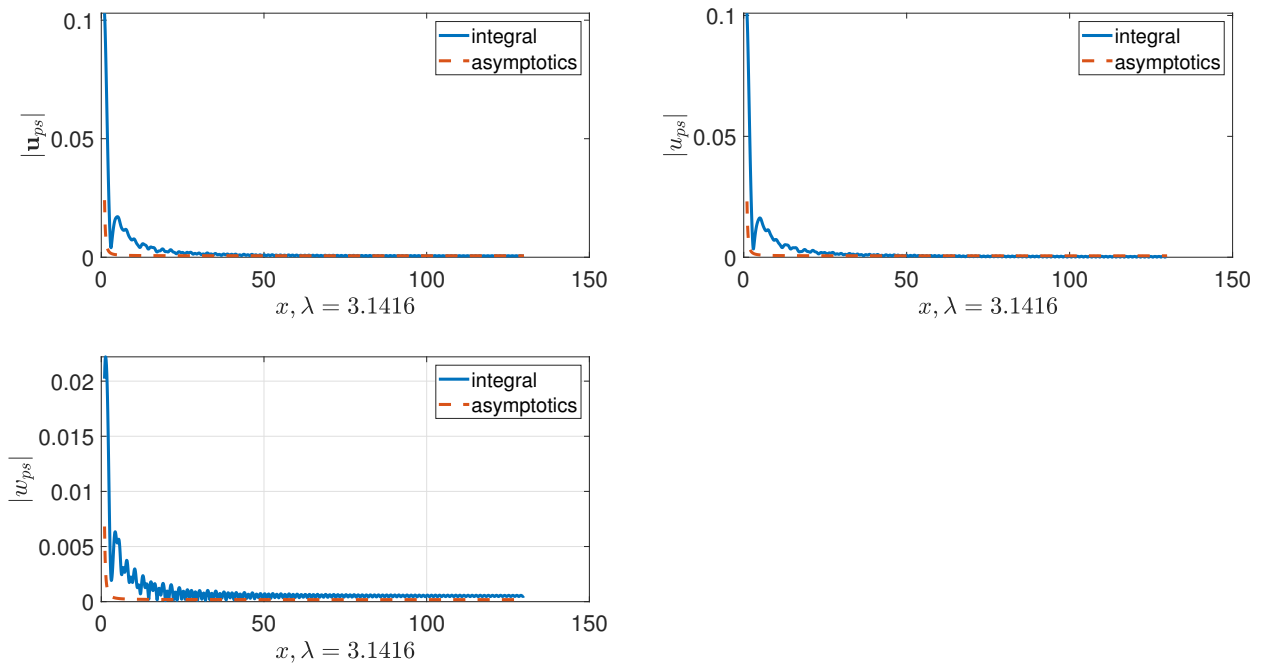


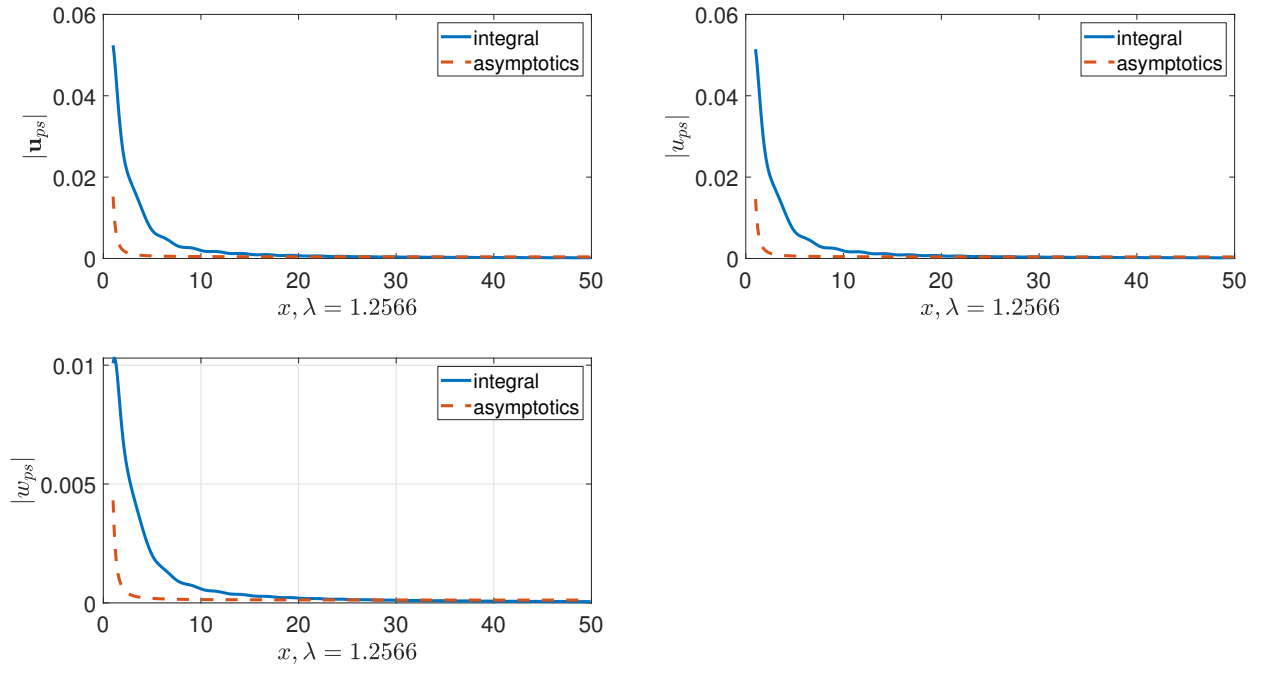
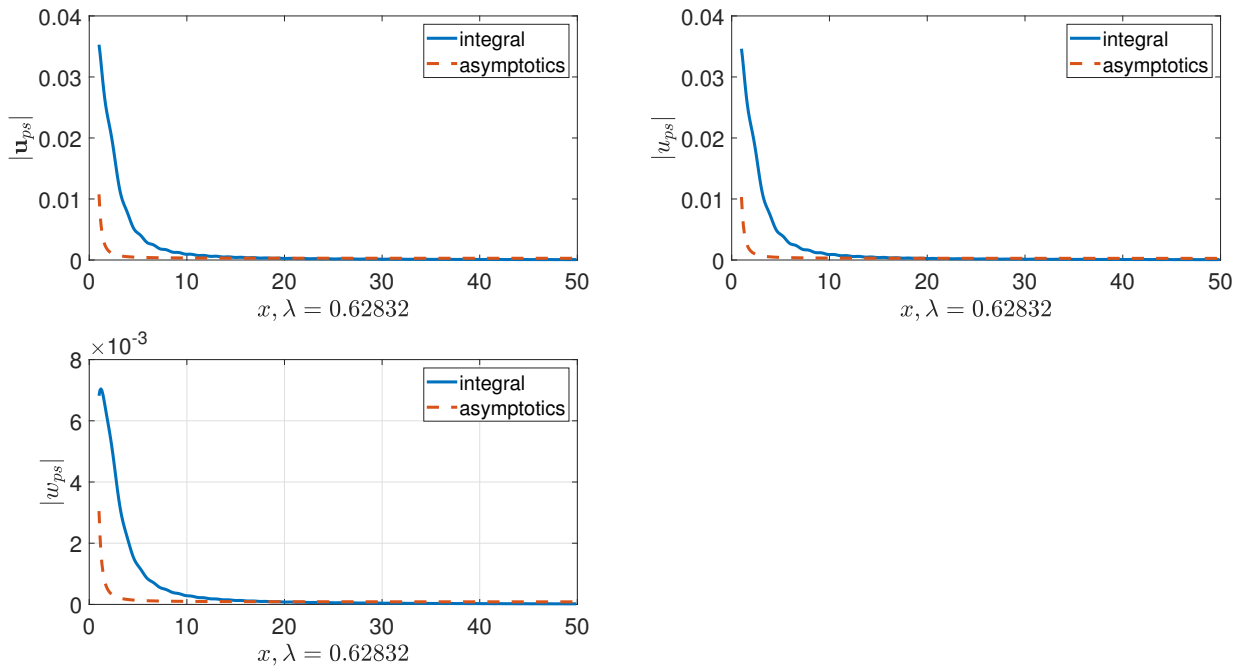
Рис. 2. $\omega = 2, \lambda = 3.14$

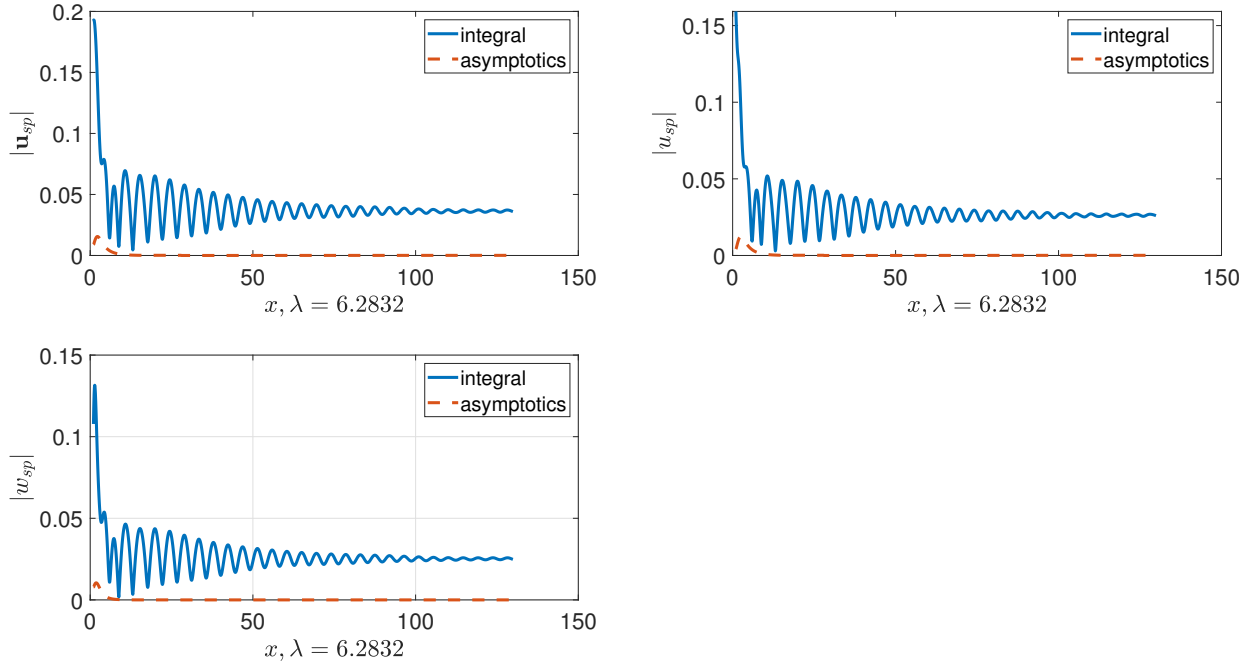
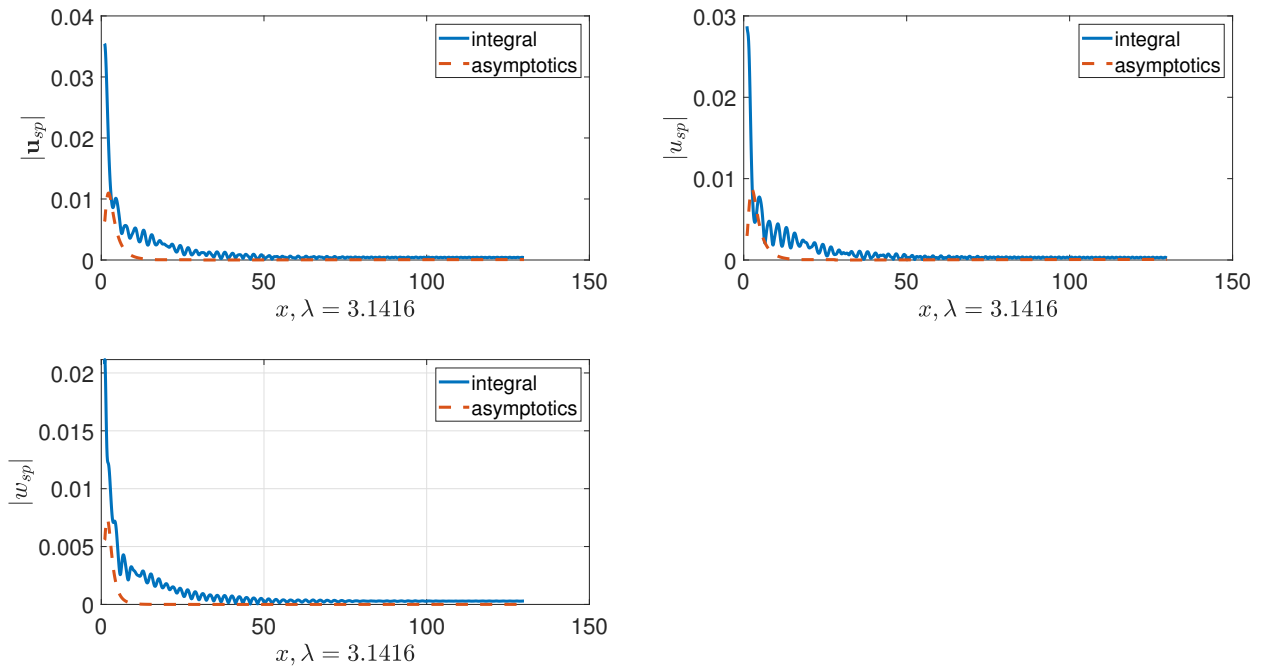
Рис. 3. $\omega = 5, \lambda = 1.25$ Рис. 4. $\omega = 10, \lambda = 0.62$

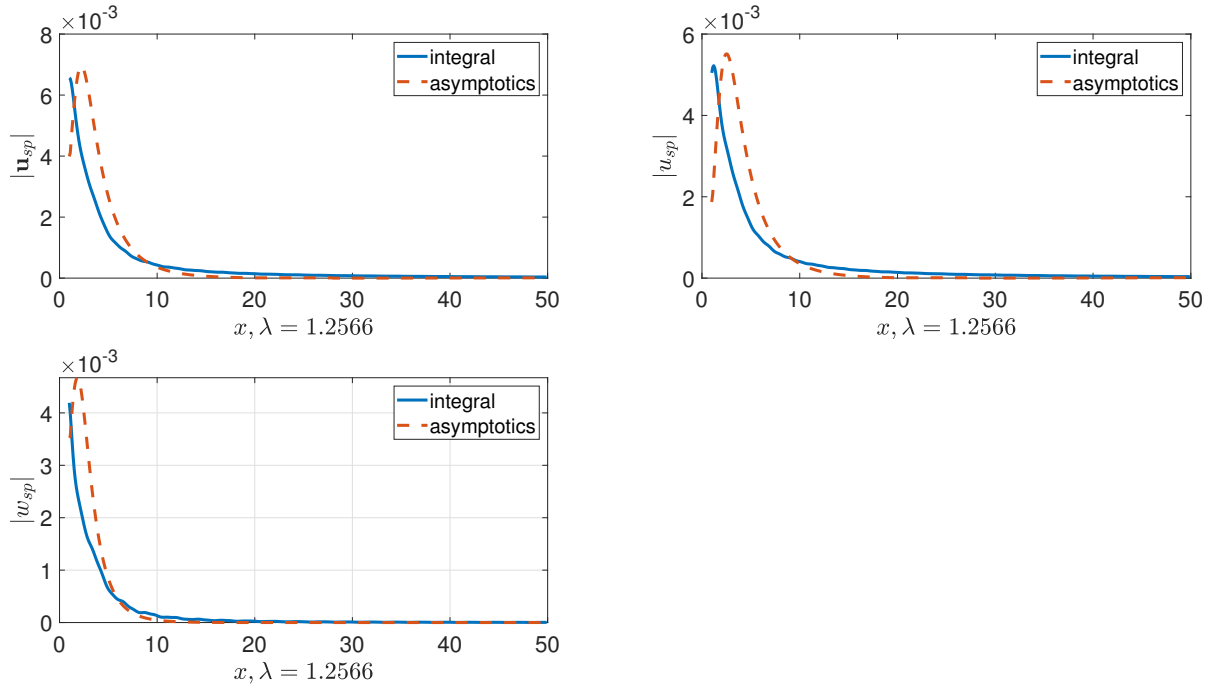
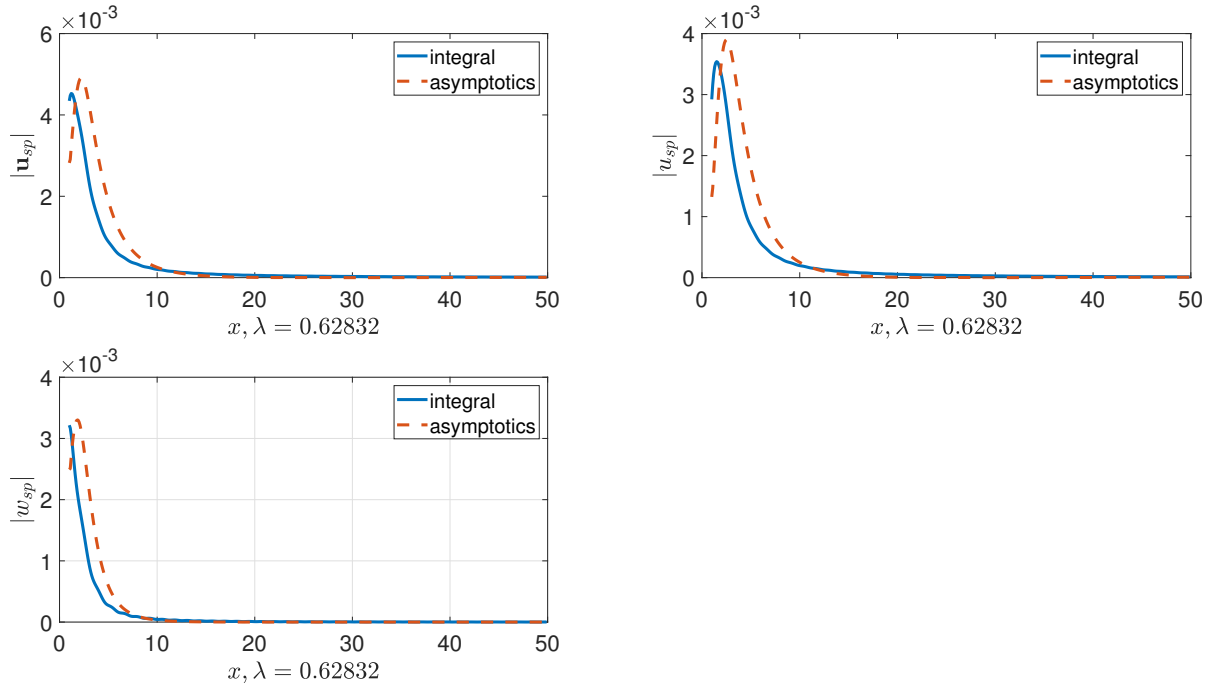
Свойства слоев:

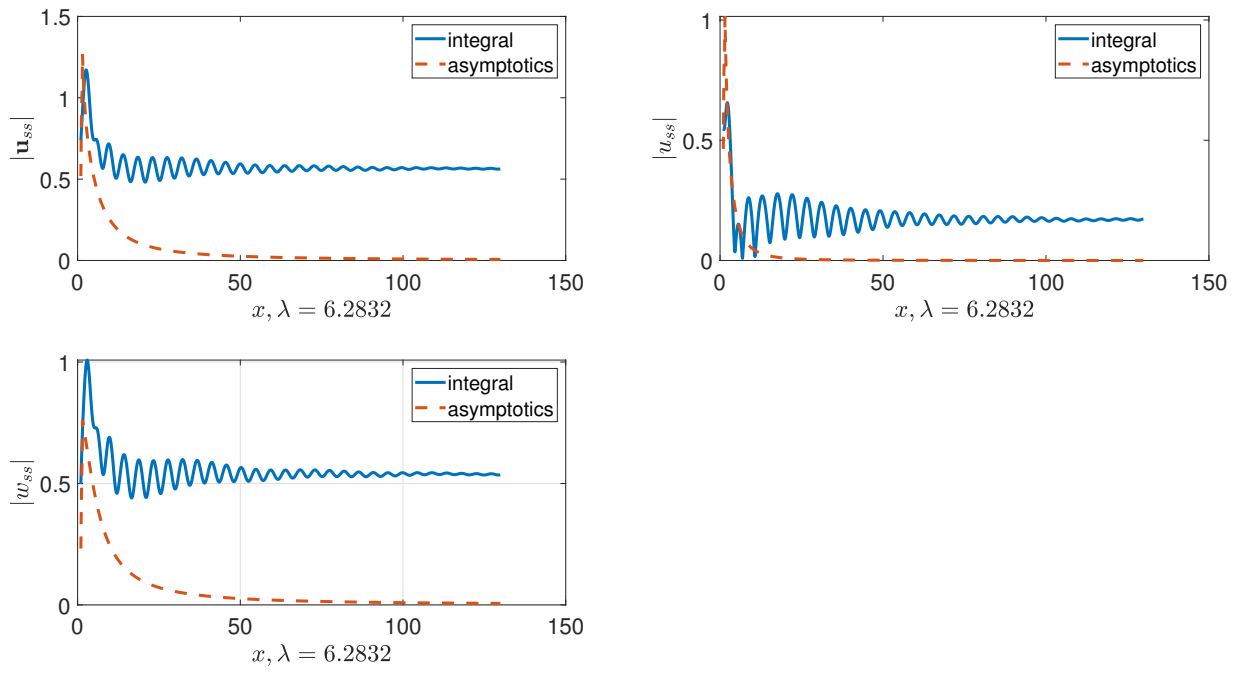
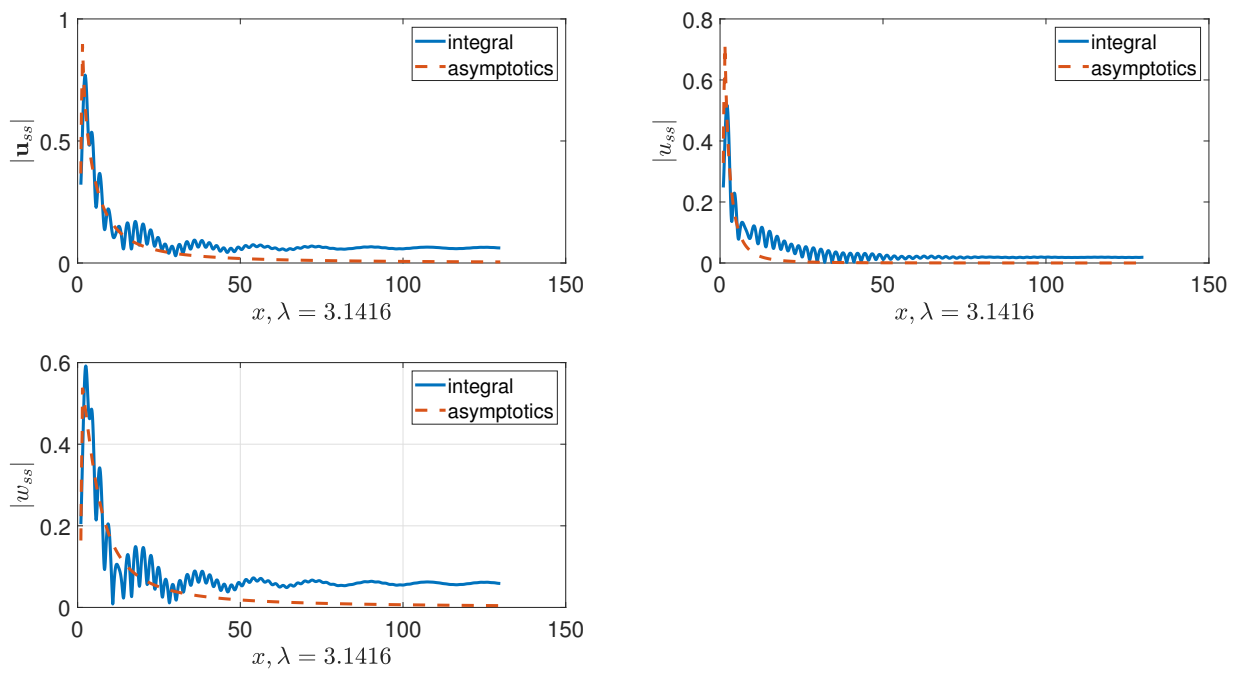
$$c_{p,1} = 2, c_{p,2} = 1, c_{s,1} = 0.5, c_{s,2} = 0.3, \rho_1 = 2, \rho_2 = 1$$

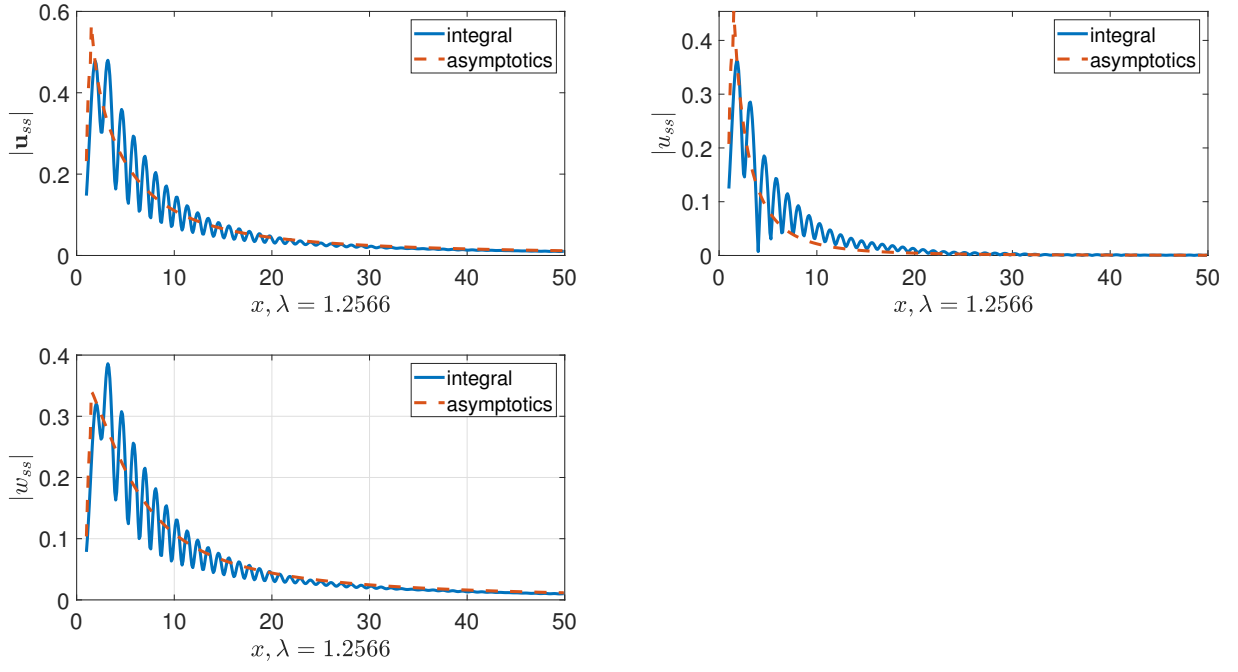
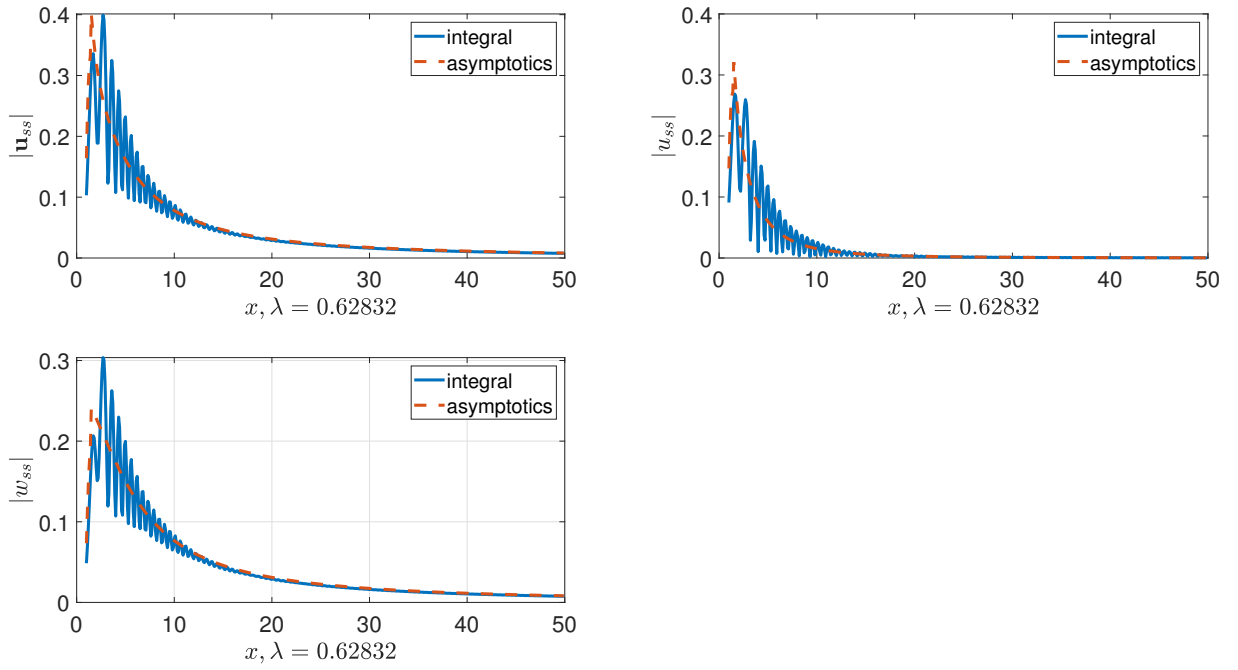
Рис. 5. $\omega = 1, \lambda = 6.28$ Рис. 6. $\omega = 2, \lambda = 3.14$

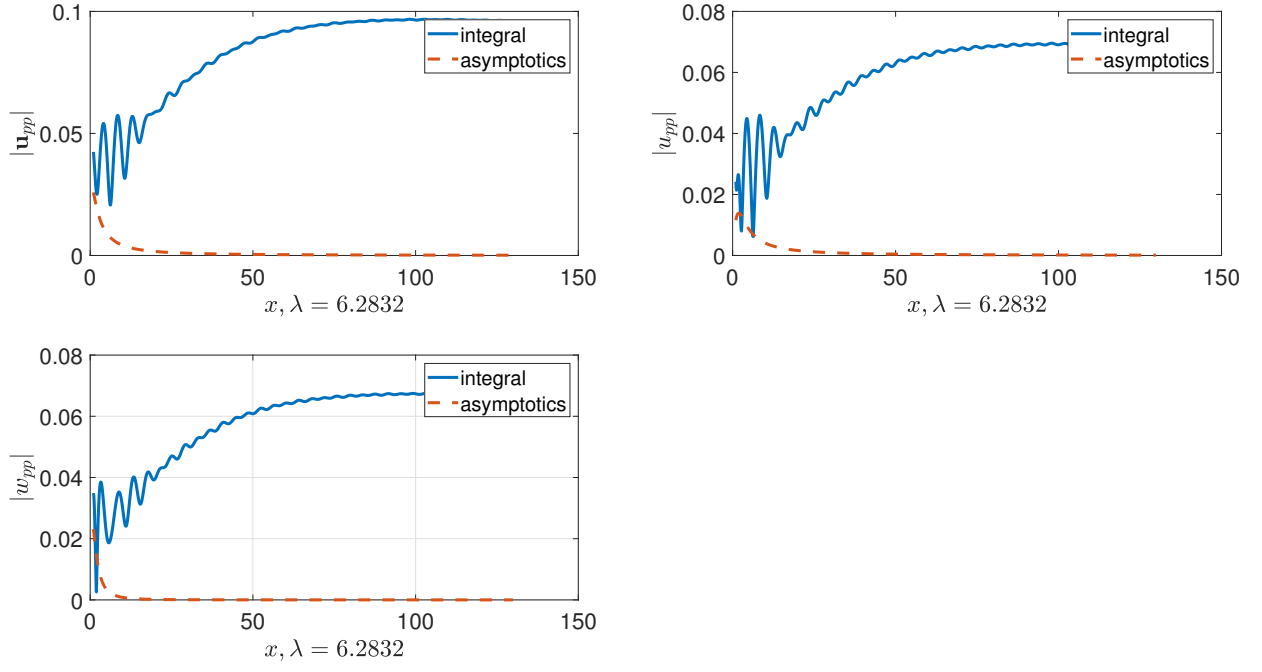
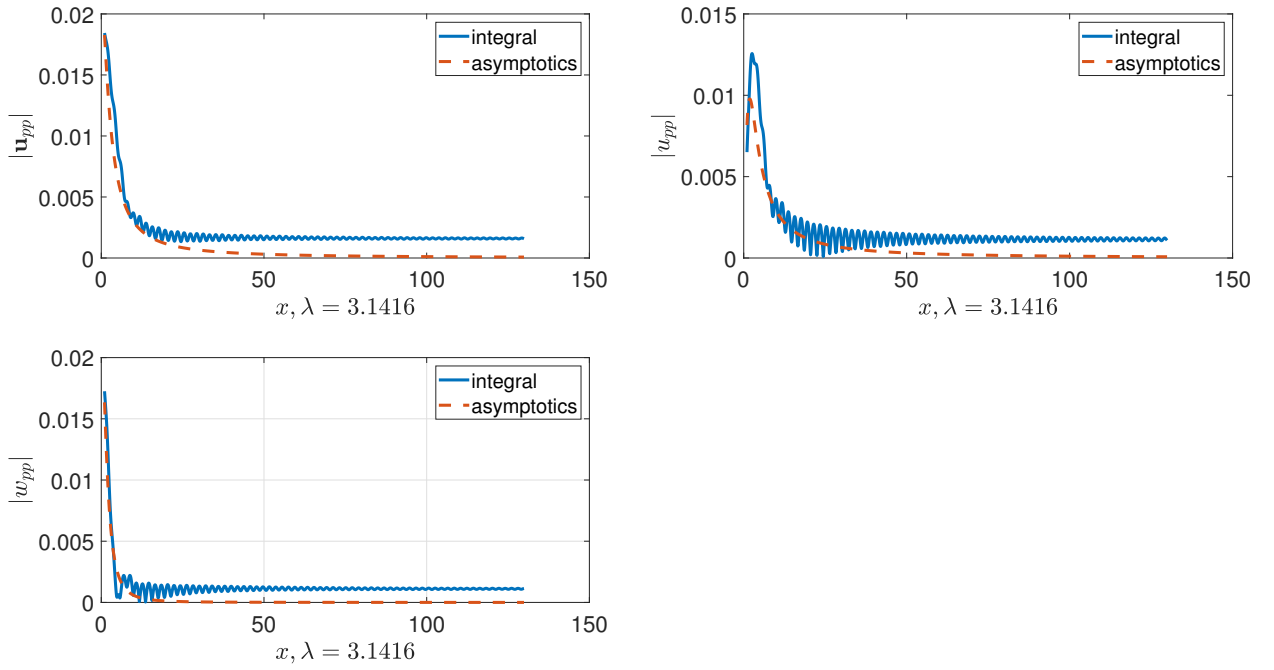
Рис. 7. $\omega = 5, \lambda = 1.26$ Рис. 8. $\omega = 10, \lambda = 0.63$

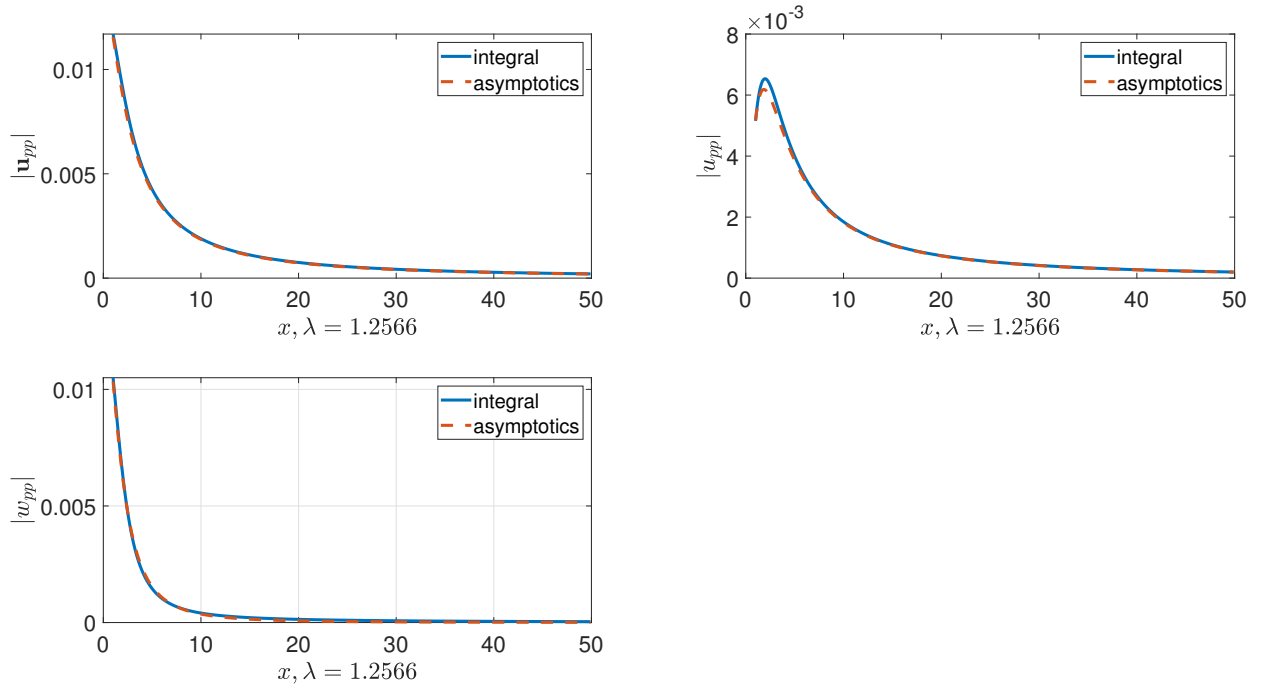
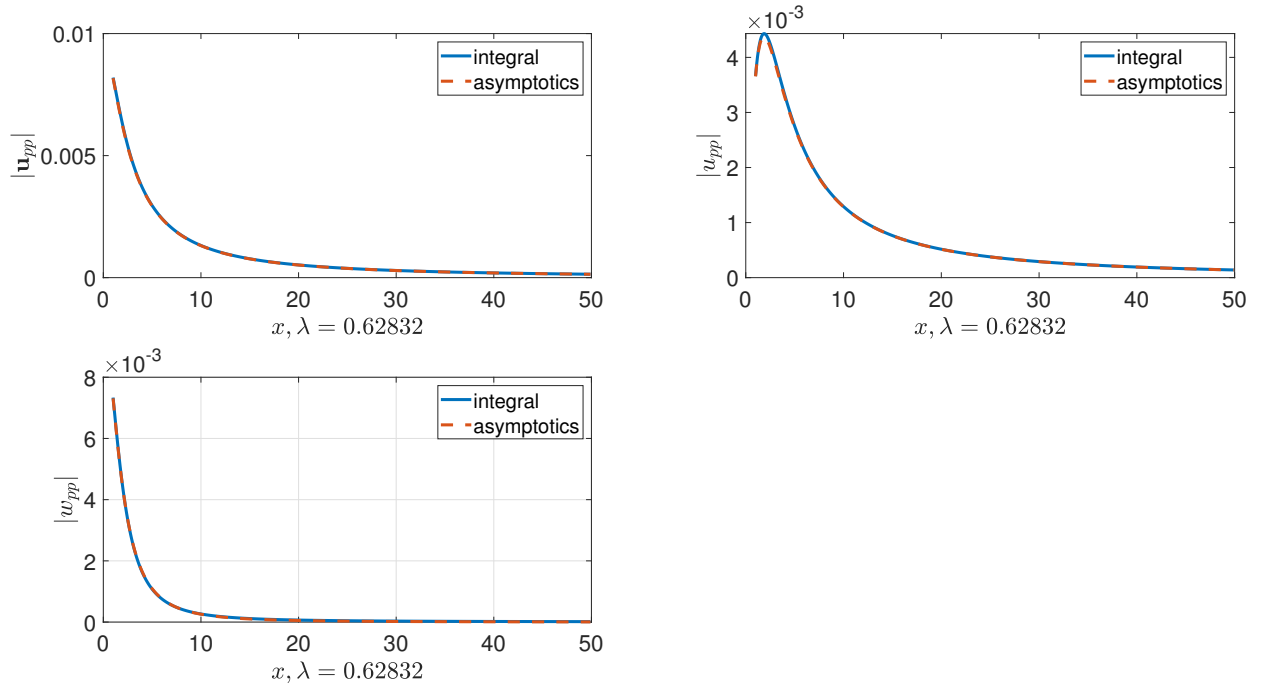
Рис. 9. $\omega = 1, \lambda = 6.28$ Рис. 10. $\omega = 2, \lambda = 3.14$

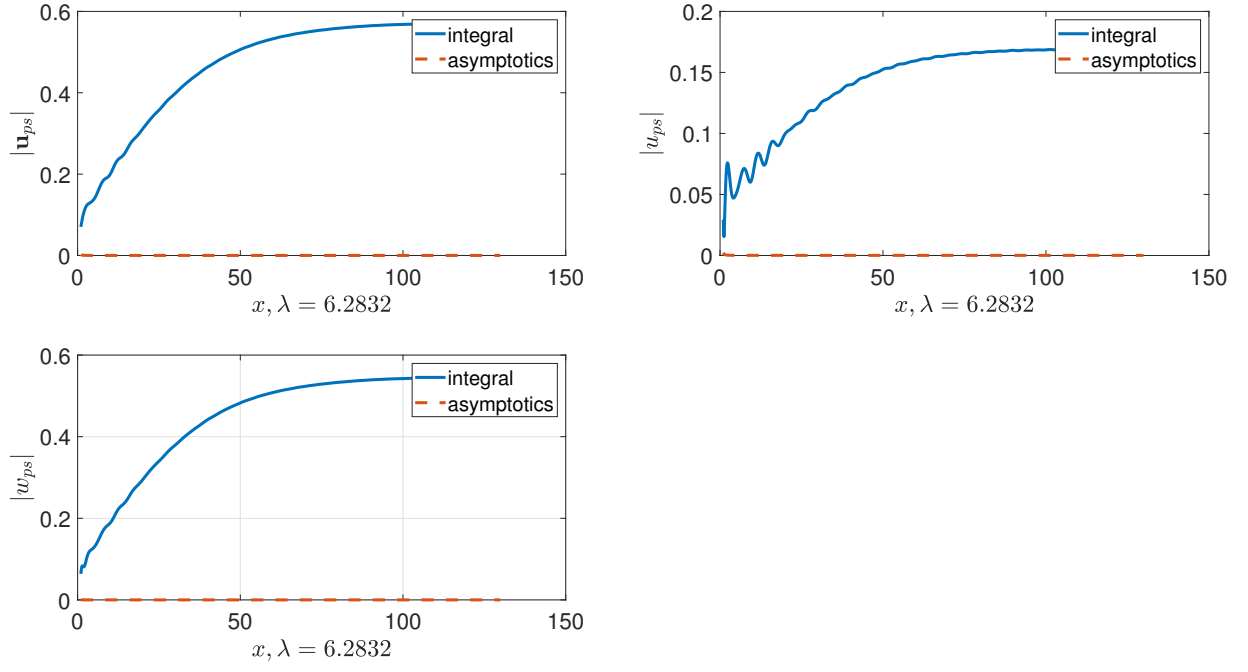
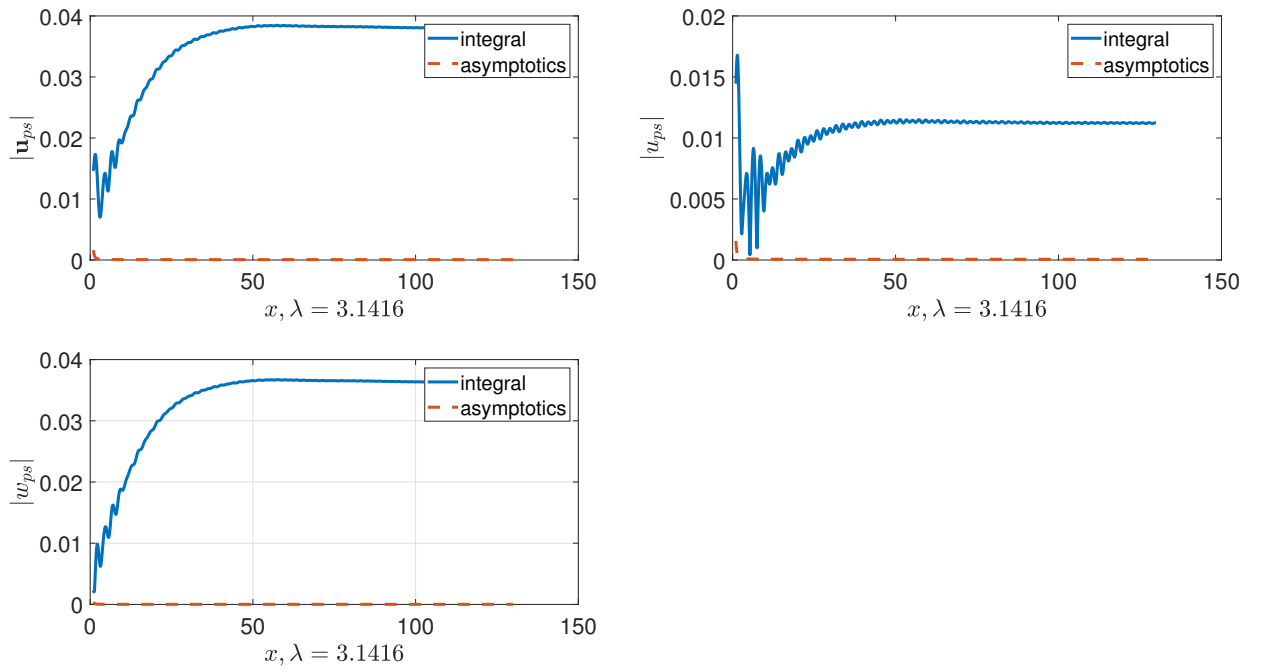
Рис. 11. $\omega = 5, \lambda = 1.26$ Рис. 12. $\omega = 10, \lambda = 0.63$

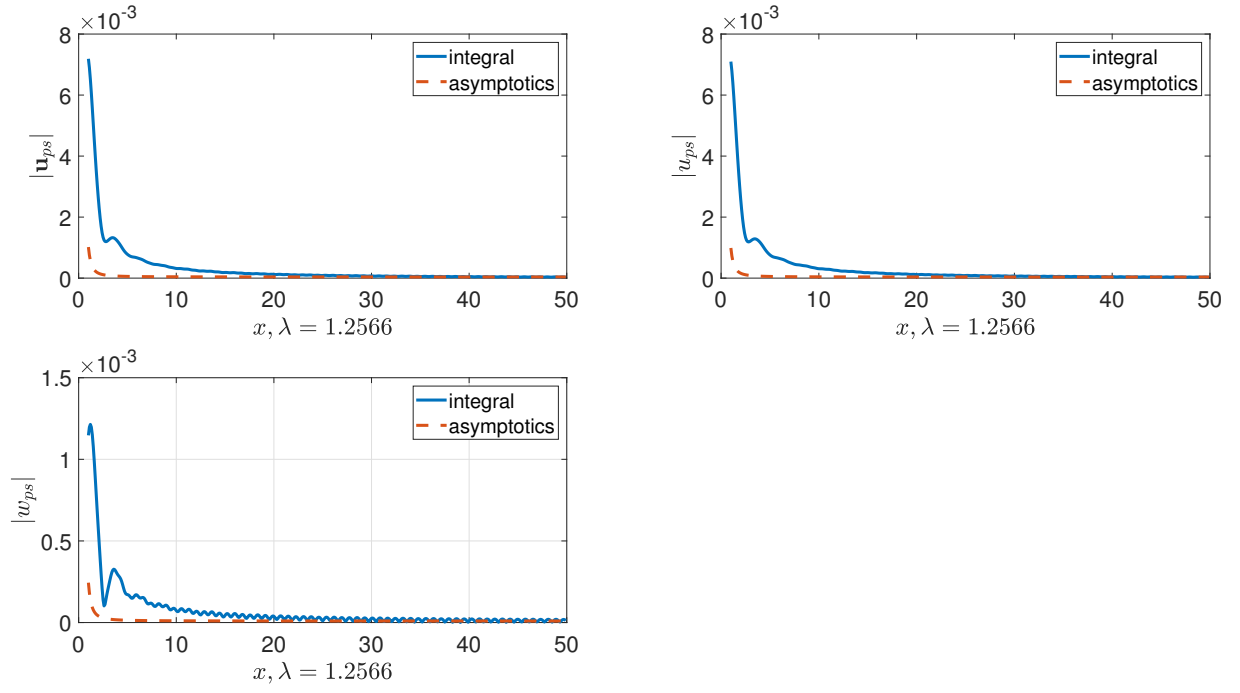
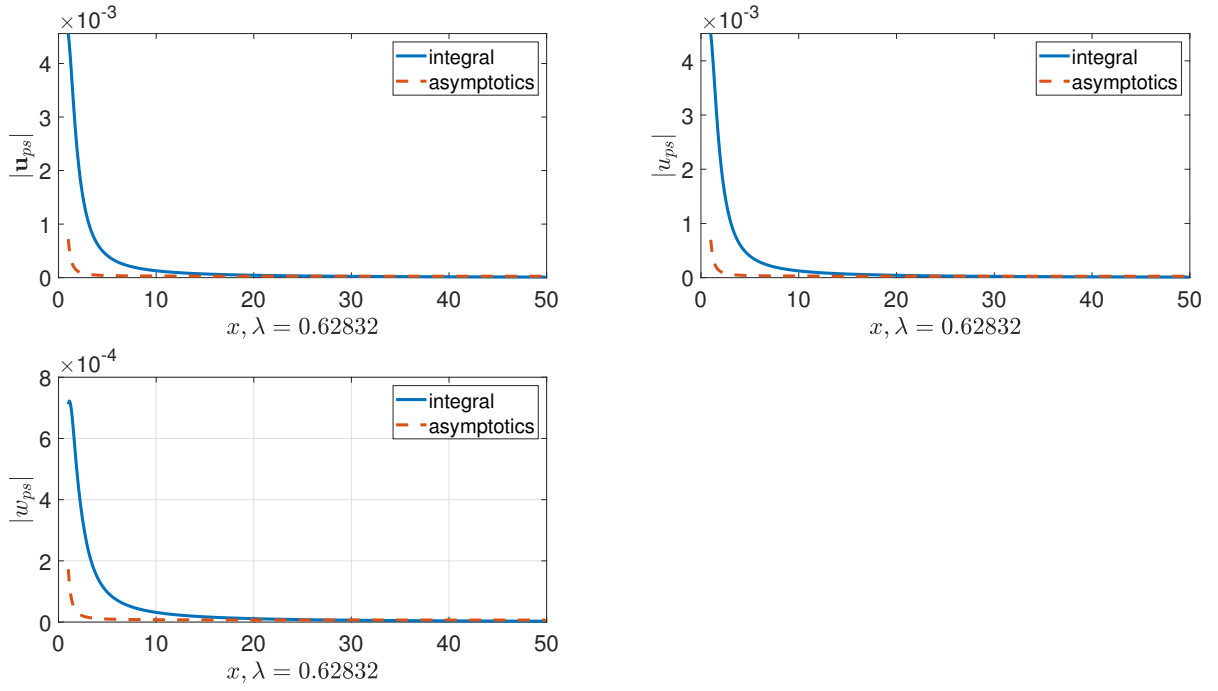
Рис. 13. $\omega = 1, \lambda = 6.28$ Рис. 14. $\omega = 2, \lambda = 3.14$

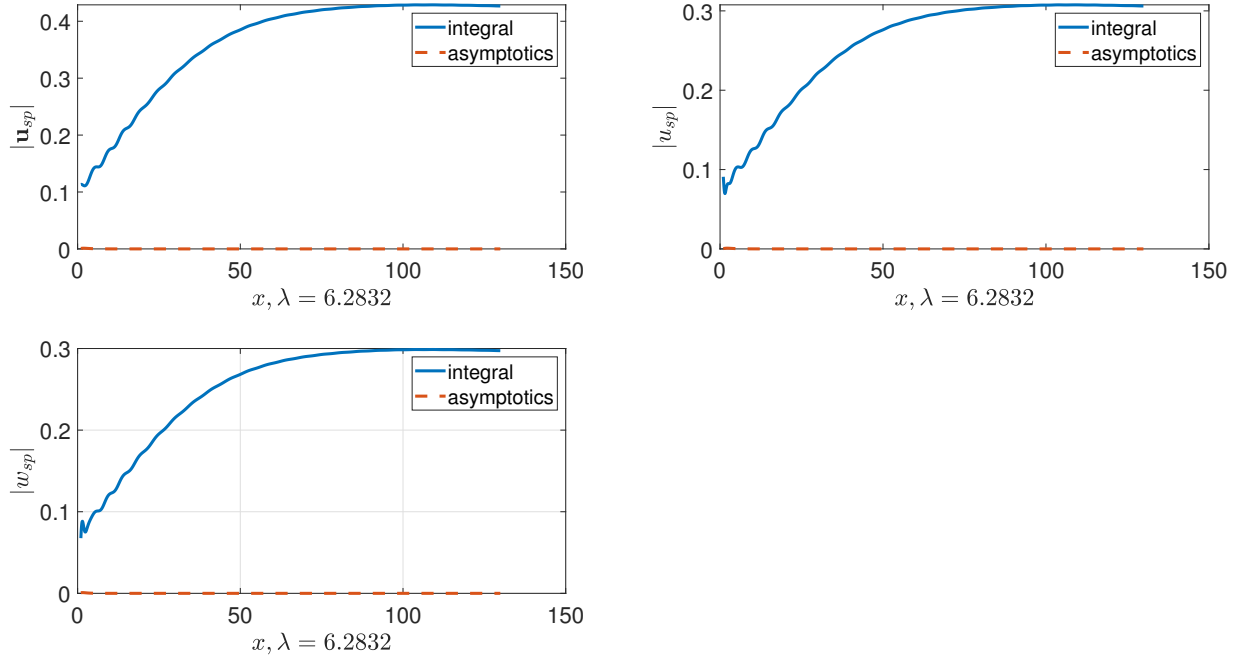
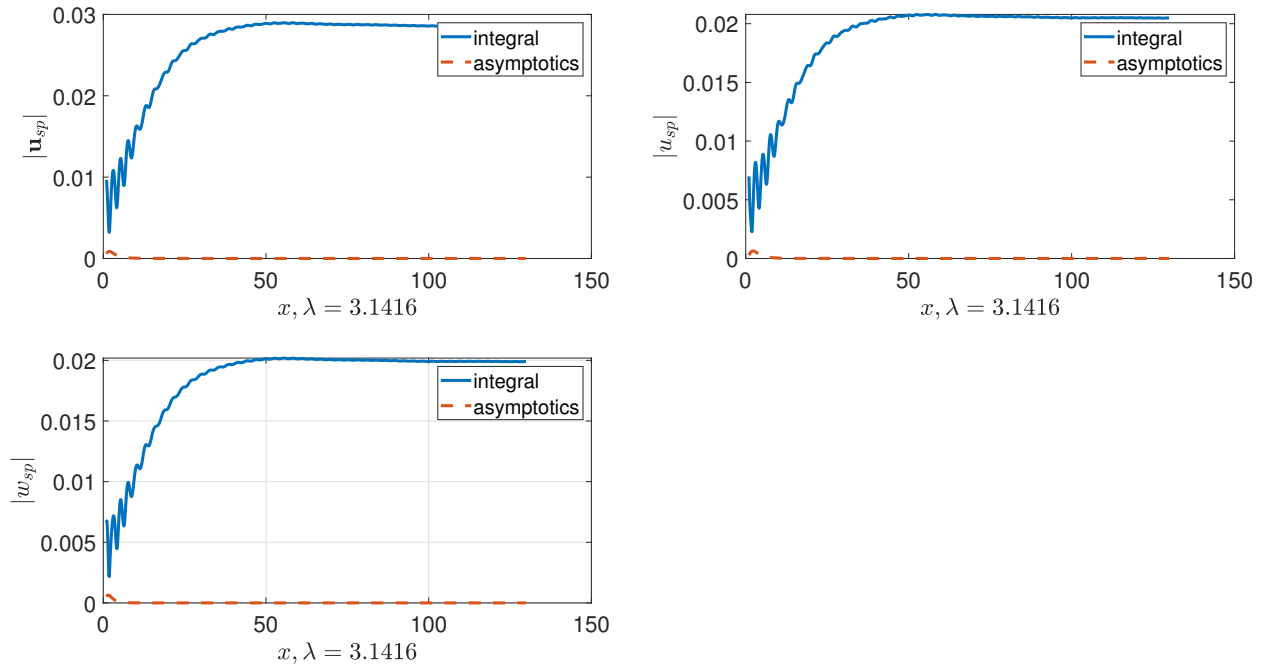
Рис. 15. $\omega = 5, \lambda = 1.26$ Рис. 16. $\omega = 10, \lambda = 0.63$

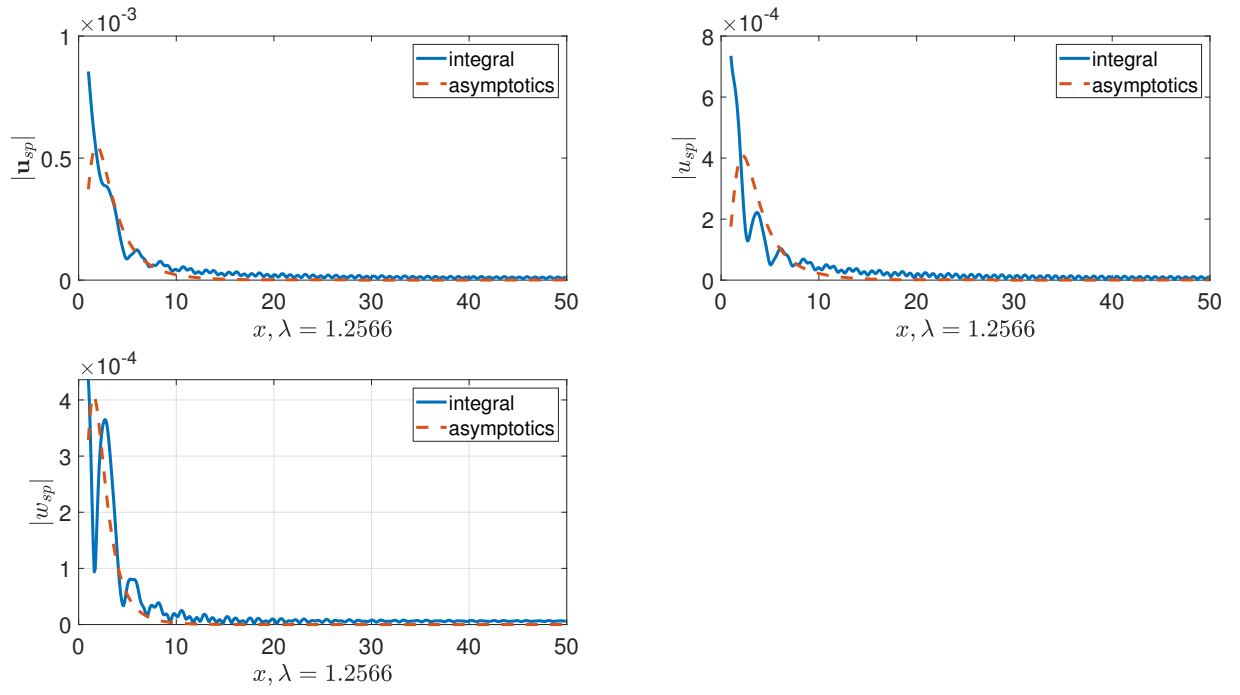
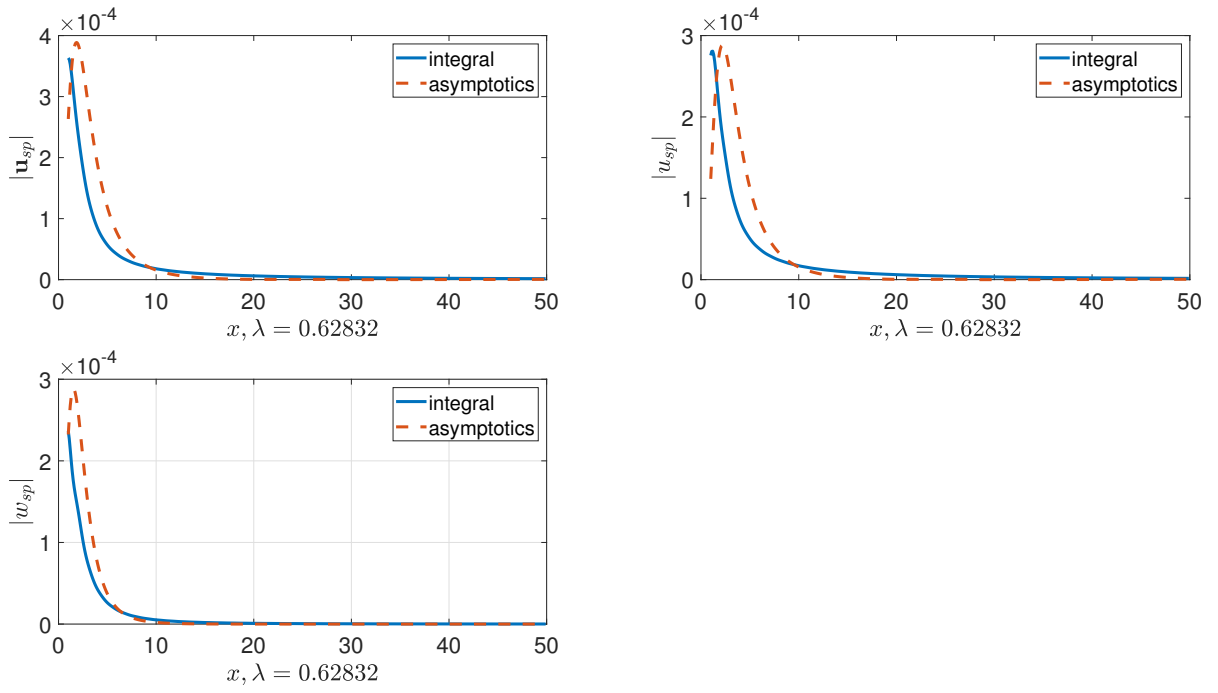
Рис. 17. $\omega = 1, \lambda = 6.28$ Рис. 18. $\omega = 2, \lambda = 3.14$

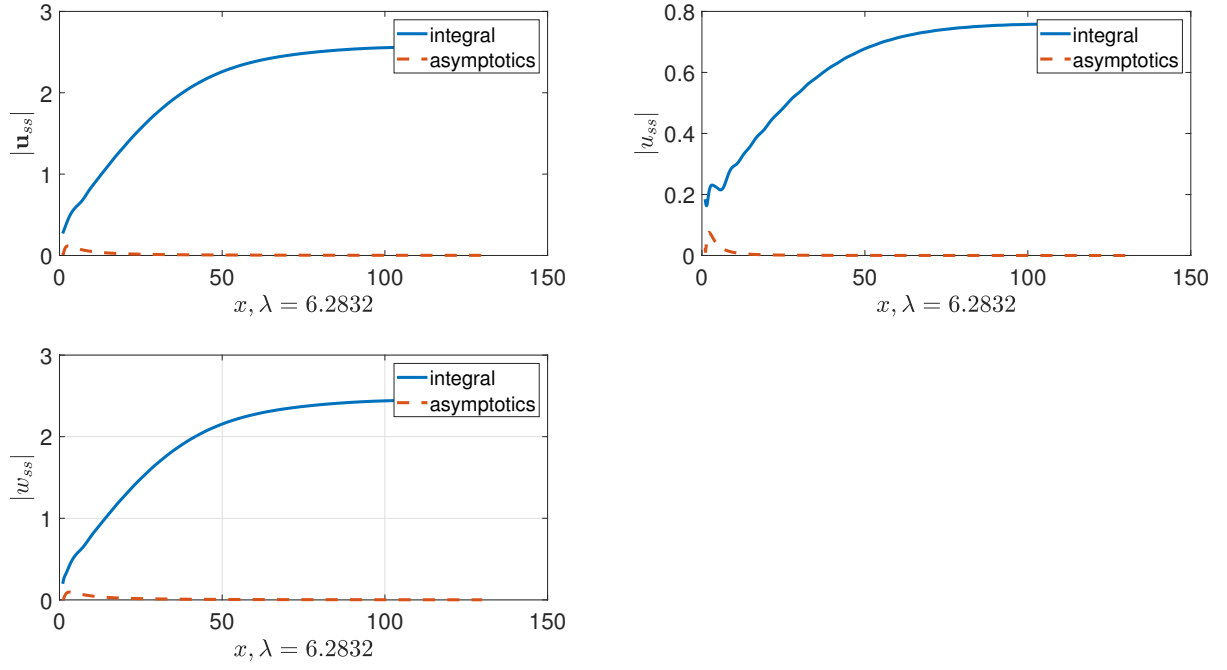
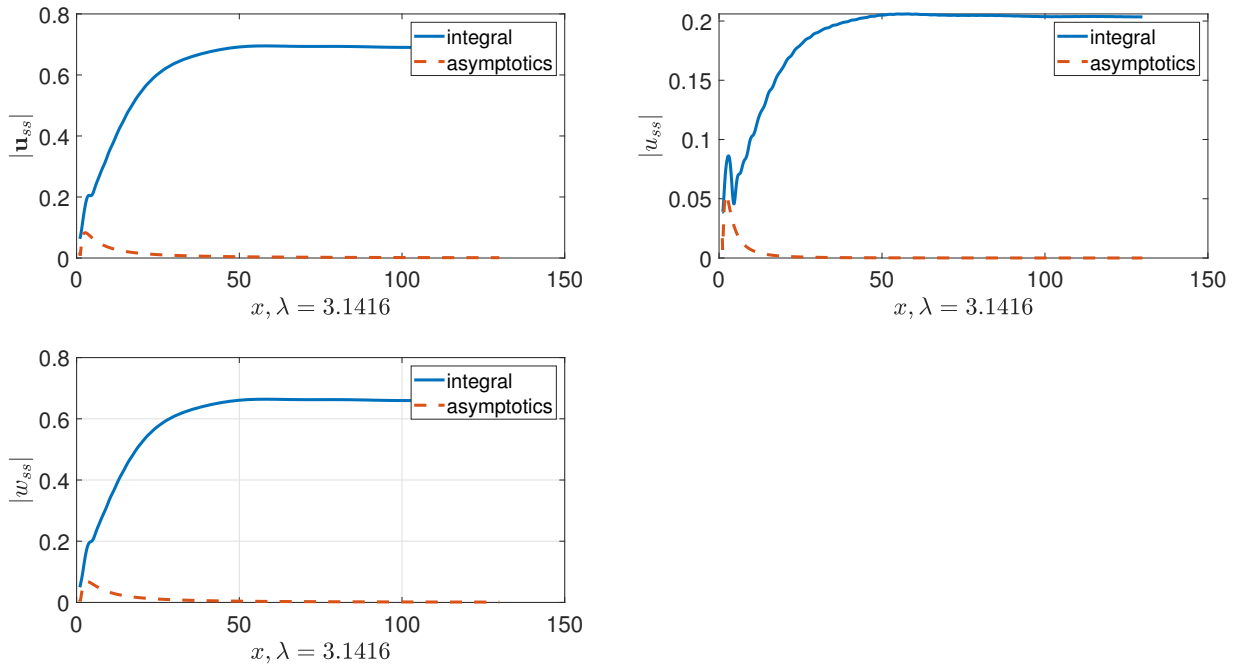
Рис. 19. $\omega = 5, \lambda = 1.26$ Рис. 20. $\omega = 10, \lambda = 0.63$

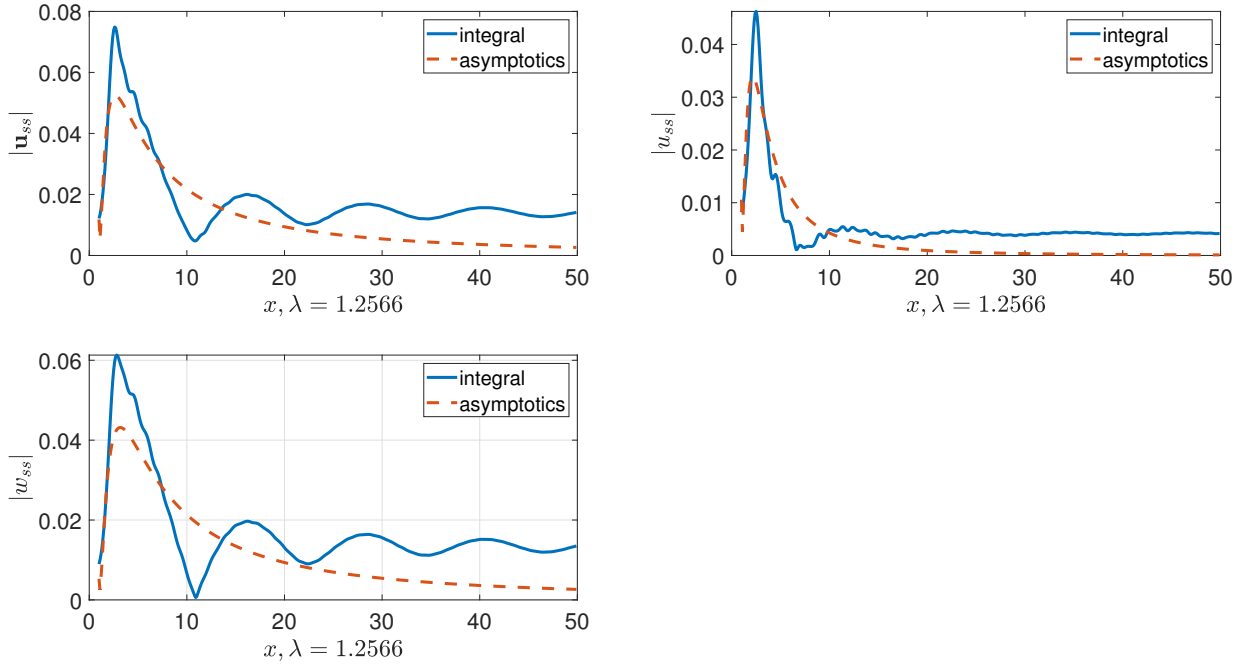
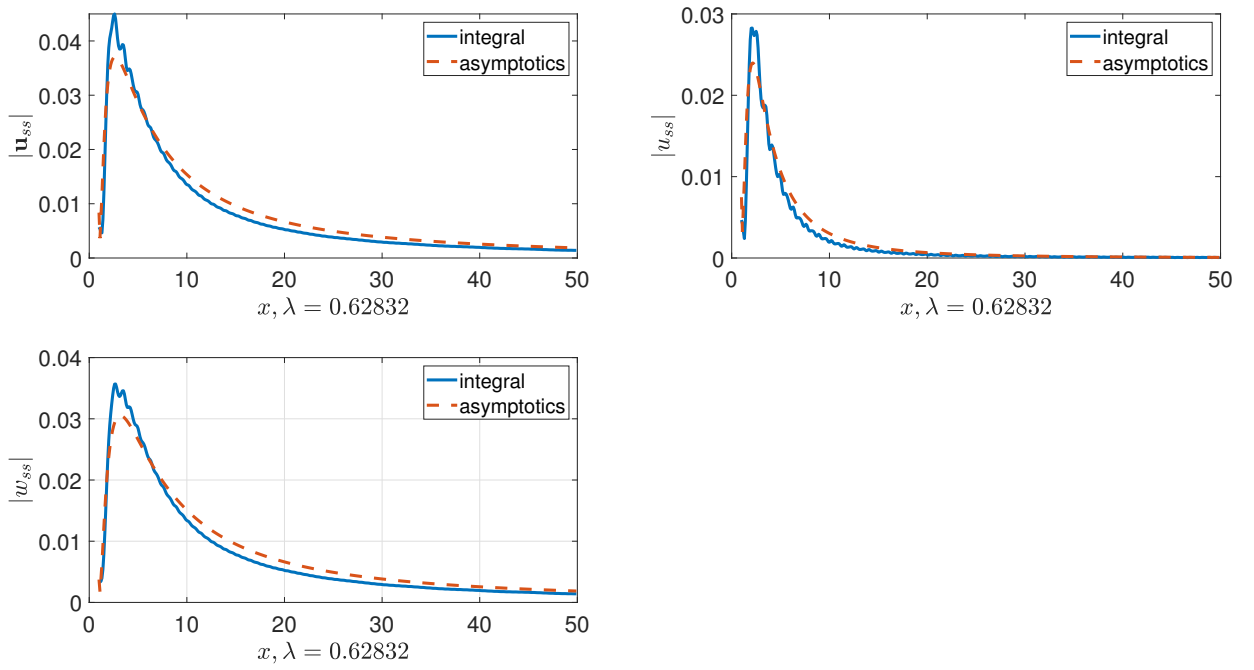
Рис. 21. $\omega = 1, \lambda = 6.28$ Рис. 22. $\omega = 2, \lambda = 3.14$

Рис. 23. $\omega = 5, \lambda = 1.26$ Рис. 24. $\omega = 10, \lambda = 0.63$

Рис. 25. $\omega = 1, \lambda = 6.28$ Рис. 26. $\omega = 2, \lambda = 3.14$

Рис. 27. $\omega = 5, \lambda = 1.26$ Рис. 28. $\omega = 10, \lambda = 0.63$

Рис. 29. $\omega = 1, \lambda = 6.28$ Рис. 30. $\omega = 2, \lambda = 3.14$

Рис. 31. $\omega = 5, \lambda = 1.26$ Рис. 32. $\omega = 10, \lambda = 0.63$