

Second Order Differential Equations

Answers to Odd-Numbered Problems

1. $y = Ae^{6x} + Be^{7x}$

3. $y = Ae^{3x/2} \cos(\frac{\sqrt{23}}{2}x) + Be^{3x/2} \sin(\frac{\sqrt{23}}{2}x)$

5. $y = A \cos(2\sqrt{3}x) + B \sin(2\sqrt{3}x)$

7. $y = A + Be^{-3x/2}$

9. $y = (A + Bx)e^{2x}$

11. $y = 2e^{2x} - e^{3x}$

13. $y = 2 \cos(\frac{x}{2}) + \sin(\frac{x}{2})$

15. $y = (7 + 5x)e^{-2(x+1)}$