

1. $\frac{dy}{dx} = 1 + x^2$

2. $\frac{dy}{dx} = x e^y$

3. $\frac{dy}{dx} = \frac{1}{y}$

4. $\frac{dy}{dx} = (\sin x)y$

5. $\frac{dy}{dx} = 1 + y^2$

6. $\frac{dy}{dx} = x^2 y^2$

7. $\frac{dy}{dx} = \sec^2 x$

8. $\frac{dy}{dx} = e^x e^y$

9. $\frac{dy}{dx} = \cos^4 x \sin x$

10. $\frac{dy}{dx} = -\frac{x}{y}$

11. $\frac{dy}{dx} = \frac{1}{1+x^2}$

12. $\frac{dy}{dx} = \frac{y}{x}$

13. $\frac{dy}{dx} = ky$

14. $\frac{dy}{dx} = \frac{x}{y^3}$

15. $\frac{dy}{dx} = \frac{1}{1+y^2}$

(SOLVE FOR x)

16. $\frac{dy}{dx} = \frac{\cos x}{\sin y}$