

1. $y = \sqrt{\sin^2 x + x^3}$

2. $y = \frac{\tan 2x}{x^2 + 5x}$

3. $y = 3x^3 \sqrt{4x + 3}$

4. $y = \cos^4(3x + 1)$

5. $y = \frac{2}{x^2} - \frac{x}{8} - x^2 \sqrt{x} + \frac{4\sqrt{x}}{x}$