For questions 1 and 2 you'll be using the product rule. For 3 and 4 you'll use the quotient rule. For question 5 you will need to differentiate in parts.

1. $(x^2 + 3x + 5)sinx$

2. $\sqrt[3]{x} * cotx$

3. $\dfrac{x^2 - 9x + 7}{sinx}$

4. $\dfrac{cosx + x^3}{7tanx}$

5. $3x^3 * cosx * cscx$