Derivative of Trigonometric Functions

Use formulas to differentiate the following functions.

1. $f(x) = sin(x) + cos(x) + 5$

2. $f(x) = sin(x) - cos(x) - 2$

3. $f(x) = 2sin(x) + 3cos(x)$

4. $f(x) = sin(x) - 6cos(x)$

5. $f(x) = sin(x)5cos(x) + 6x$

6. $f(x) = 2sin(x)cos(x) - 7x$

7. $f(x) = 3xsin(x)$

8. $f(x) = 5xsin(x)$

9. $f(x) = 4x^2cos(x)$

10. $f(x) = 3x^2cos(x)$

11. $f(x) = 2x^3 + sin(x)cos(x)$

12. $f(x) = 5x^4 + sin(x)cos(x)$

13. $f(x) = tan(x) - \sec(x) + 6$

14. $f(x) = sec(x) - \tan(x) + 6$

15. $f(x) = \sqrt{x}\csc(x) - 4xsec(x) + x$

16. $f(x) = \sqrt{x}\sec(x) - 4xcsc(x) - x$

17. $f(x) = (\sin(x) - 4)(\tan(x) + 5)$

18. $f(x) = (\sin(x) - 4)(\tan(x) + 5)$

19. $f(x) = \frac{x^3}{\tan(x)}$

20. $f(x) = \frac{x^3}{\cot(x)}$

21. $f(x) = \frac{\cot(x)}{x^2}$

22. $f(x) = \frac{\tan(x)}{x^2}$

23. $f(x) = \frac{\sec(x)}{\sqrt{x}}$

24. $f(x) = \frac{\csc(x)}{\sqrt{x}}$

25. $f(x) = \frac{4xcos(x)}{x^2-4}$

26. $f(x) = \frac{4xsin(x)}{x^2-4}$