MCS21 Homework 24

Find $\dfrac{dy}{dx}$.

1. $y = \cos^3 x$

2. $y = \tan\left(4x^2\right)$

3. $y = \tan^4\left(x^3\right)$

4. $y = \sin(\tan 3x)$

5. $y = \left[1 + \sin^3\left(x^5\right)\right]^{12}$

6. $y = \dfrac{\sin x}{\sin\left(3x + 1\right)}$

7. $y = \sec^4 2x$

8. $y = \sqrt{\csc x}$

9. $y = x^3 \sec\left(9 - x^2\right)$