



Calculus

Determine: $\frac{dy}{dx}$

1. $y = \frac{2}{\sqrt{x^3}} - \frac{2}{\sqrt[4]{x^2}} + 2x^{-3}$

2. $y = \frac{2x^3 - 4x + 6}{\sqrt{x}}$



3. $y = \left(\frac{3}{x} + 4\sqrt{x}\right)^2$

4. $y = \frac{2x^2 + 5x - 12}{2x - 3}$