Symbolab

Derivatives

Basic

Quotient Rule

1. $\frac{d}{dx}\left(\frac{x-1}{x+1}\right)$

2. $\frac{d}{dx}\left(\frac{3x+9}{2-x}\right)$

3. $\frac{d}{dx}\left(\frac{7x+4}{3x+2}\right)$

4. $\frac{d}{dx}\left(\frac{4x-7}{x^2+5x}\right)$

5. $\frac{d}{dx}\left(\frac{3x^2+5x+4}{\sqrt{x}}\right)$

6. $\frac{d}{dx}\left(\frac{x}{x+1}\right)$

7. $\frac{d}{dx}\left(\frac{2x^2}{x^2-x}\right)$

8. $\frac{d}{dx}\left(\frac{\sqrt{x}}{3x}\right)$

9. $\frac{d}{dx}\left(\frac{4x^2-2x+1}{2x+3}\right)$

10. $\frac{d}{dx}\left(\frac{x-3}{2x}\right)$

Symbolab

Answers

Derivatives

Basic

Quotient Rule

1. $\frac{2}{\left(x+1\right)^2}$

2. $\frac{15}{\left(2-x\right)^2}$

3. $\frac{2}{\left(3x+2\right)^2}$

4. $\frac{-4x^2+14x+35}{\left(x^2+5x\right)^2}$

5. $\frac{9x^2+5x-4}{2x\sqrt{x}}$

6. $\frac{1}{\left(x+1\right)^2}$

7. $-\frac{2}{\left(x-1\right)^2}$

8. $-\frac{1}{6x^{\frac{3}{2}}}$

9. $\frac{8x^2+24x-8}{\left(2x+3\right)^2}$

10. $\frac{3}{2x^2}$