

Derivatives

Basic

Sum/Difference Rule

1. $\frac{d}{dx}(5x + 2)$

2. $\frac{d}{dx}(x^2 + 1)$

3. $\frac{d}{dx}\left(\frac{3x^2}{10} + 40x + 10\right)$

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

5. $\frac{d}{dx}\left(\frac{1}{3}(x^3 - x)\right)$

6. $\frac{d}{dx}(5x^2 - 3x + 1)$

7. $\frac{d}{dx}\left(\frac{1}{2}x + 2\right)$

8. $\frac{d}{dx}(3 + 2x^2)$

9. $\frac{d}{dv}(4v^3 - 1)$

10. $\frac{d}{dv}(2 + 4v^4)$

Answers

Derivatives

Basic

Sum/Difference Rule

1. 5

2. $2x$

3. $\frac{3x}{5} + 40$

4. $x - \frac{1}{2}$

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

6. $10x - 3$

7. $\frac{1}{2}$

8. $4x$

9. $12v^2$

10. $16v^3$