

Symbolic Differentials

For each function, find the exact differential $dy = f'(x) \, dx$. Keep the full derivative grouped as the coefficient of dx .

1. $y = 1(2x^3-3x+2)^2$

Find dy .

2. $y = -x^3+5x-2$

Find dy .

3. $y = 4\cos(2x+6)$

Find dy .

4. $y = (2x-3)/(-x+2)$

Find dy .

Symbolic Differentials

For each function, find the exact differential $dy = f'(x) \, dx$. Keep the full derivative grouped as the coefficient of dx .

5. $y = 1(-2x^2+1)^{-2}$

Find dy .

6. $y = -3x^2+2x+7$

Find dy .

7. $y = 2\tan(5x+1)$

Find dy .

8. $y = (2x^2-1)/(x^2+x-1)$

Find dy .

Symbolic Differentials

For each function, find the exact differential $dy = f'(x) \, dx$. Keep the full derivative grouped as the coefficient of dx .

9. $y = 1(x^2+2x-1)^3$

Find dy .

10. $y = x^4-2x^2+3$

Find dy .