Differentiation from first principles

Scaffolded solutions

Examples



Question 1

differentiate from first principles x4









Question 2

differentiate from first principles 3x2













Question 3

differentiate from first principles 5x3













Question 4

differentiate from first principles -2x3



















Question 5

differentiate from first principles x4

















Question 6

differentiate from first principles 3x2 + 7













Question 7

differentiate from first principles -3x3 - 12



















Question 8

differentiate from first principles 5x4 – 2x





Questions:

Use Differentiation from first principles to find the derivative of:

1. 6x2
2. 8x3
3. -4x3
4. 9x
5. 10x2-6
6. –x4
7. 5 – 4x2
8. 7x3 + 6x
9. 2x4 – 5x2
10. x3 + 12x2 – 7x