

Chapter 4 Integration Examples

INSERT NAME HERE

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Problem 4.1 – Solving a Differential Equation Find the general solution of the differential equation $y' = 2$

Problem 4.2 – Describing Antiderivatives $\int 3xdx = 3 \int xdx$

Problem 4.3 – Rewriting Before Integration • $\int 1/x^3 dx$

• $\int \sqrt{x} dx$

Problem 4.4 – Integrating Polynomial Functions • $\int dx = \int 1dx$

• $\int (x + 2)dx = \int xdx + \int 2dx$

• $\int (3x^4 - 5x^2 + x)dx$

Problem 4.5 – Rewriting Before Integrating

Problem 4.6 – Rewriting Before Integrating

Problem 4.7 – Rewriting Before Integrating

Problem 4.8 – Finding a Particular Solution

Problem 4.9 – Solving a Vertical Motion Problem