

MATH1040 INTEGRATION PRACTICE

1. (a) Find $\int (3x^2 + 4x + 1) dx$.
(b) Find $\int \left(e^x + \frac{2}{x} \right) dx$.
(c) Evaluate $\int (12x^2 - 2x) dx$.
(d) Evaluate $\int (-2e^x + 8x) dx$.
2. (a) Find $\int (6x^2 - 2x + 10) dx$.
(b) Find $\int \left(e^x - \frac{1}{x} \right) dx$.
(c) Evaluate $\int (3x^2 + 4x + 5) dx$.
(d) Evaluate $\int (2e^x + 3x + 5) dx$.
3. (a) Find $\int (9x^2 + x + 5) dx$.
(b) Find $\int \left(2e^x - \frac{3}{x} \right) dx$.
(c) Evaluate $\int (6x^2 - 6x + 6) dx$.
(d) Evaluate $\int (e^x + 4) dx$.