



## Lesson 3.6 – Integrals of Polynomials

1. Evaluate each integral.

(a)  $\int (x\sqrt{x} + \sqrt[3]{x}) dx$

(b)  $\int_0^1 (3x^9 - 4x^5 + 2) dx$

2. Let  $f(x) = \frac{6}{x^2} - 3x^2$ . Find an antiderivative  $F$  of  $f$  that passes through the point  $(2, -5)$ .