

# INDEFINITE INTEGRALS & THE NET CHANGE THEOREM

Lesson 4.4

## PROBLEM (LEVEL I)

Evaluate.

(a)  $\int x^{4/3} dx$

(b)  $\int (t^2 + 4t + 5) dt$

(c)  $\int \sec^2 \theta d\theta$

**PROBLEM (LEVEL II)**

Evaluate.

(a)  $\int (3x + 5)^2 dx$

(b)  $\int \frac{x^3 + 4x}{x} dx$

(c)  $\int \sin(3x) dx$

**PROBLEM (LEVEL III)**

Evaluate.

(a)  $\int \tan^2 x \, dx$

(b)  $\int \frac{1}{1 - \cos x} \, dx$