

## Problem Set 14

### 7.5: Strategy of Integration

*Please indicate the members who are present. Also indicate the group coordinator.*

Group Number:	
Members:	

**Problem 1**

Find the integral  $\int \frac{x + \arcsin(x)}{\sqrt{1-x^2}} dx$ .

**Problem 2**

Evaluate  $\int_{-1}^2 |e^x - 1| dx$ .

**Problem 3**

Evaluate  $\int \frac{\tan^{-1} x}{x^2} dx$ .

**Problem 4**

(a) Evaluate  $\int \sqrt{1 - \sin(x)} dx$ .

(b) Evaluate  $\int_{-\pi/2}^{\pi/2} \sqrt{1 - \sin(x)} dx$ .

**Problem 5**

Find the integral  $\int x \sin^2 x \cos x \, dx$ .

**Problem 6**

Find the integral  $\int \frac{dx}{\sqrt{x} + x\sqrt{x}}.$







