1) Find the solution of the following integral. (3 points)

$$\int \frac{dx}{\sqrt{5 - x^2 - 4x}} \tag{1}$$

hint: First use the complete square method and by performing a suitable substitution change the denominator of this integral to one of the following formats

$$\sqrt{a^2 - u^2} \quad or \quad \sqrt{u^2 - a^2} \quad or \quad \sqrt{a^2 + u^2} \tag{2}$$

where, a is a constant. Then use the appropriate trigonometric substitution and find the solution.

2) Evaluate the following integral.

$$\int \frac{1}{x^3 - x} dx \tag{3}$$