You are encouraged to work in groups of two to four on this assignment and make a single group submission. Each problem is worth 5 points. For full credit indicate clearly how you reached your answer. All work must be legible and submitted on clean paper without ragged edges.

1. Derive line 26 from the table of integrals in the back of the book.

2. Derive a formula for \( \int u^4\sqrt{a^2-u^2} \, du \) like those in the table in the back of the book.