

## SECTION 5.7: INTEGRALS RESULTING IN INVERSE TRIG FUNCTIONS

### INSTRUCTOR NOTES

This sheet requires so heavy-duty algebra skills along with creativity.

Things to emphasize:

- Get student to list the ways they would pick  $u$ . The list should include: something raised to a power, something inside a trig function, the exponent of  $e$ , the denominator, something whose derivative is also in the integrand.
- The formulas in #2 should be produced by the students.
- # 3, students should be given a chance to start independently or in groups at their desks. However, plugging into arc trig functions will require teacher help.
- # 4 For each of these problems, I would work the problem and then give them a simple analog. So it goes, teacher-student-teacher-student-etc.
- Then have them work #5 and get the solution on the board.