Problem of the Week.

Proposed by Bernardo Ábrego and Silvia Fernández.

Find all integers n, such that

$$\frac{9n^2+1955}{3n-7}$$

is also an integer. Justify why your solution includes ALL possible values of n.

Deadline: September 6, 2004 before 9:00 PM. Next problem of the week: Available in our web site on September 6 at 2:00 PM. www.csun.edu/math/probweek

<u>Rules</u>:

- 1. Open to all enrolled undergraduate and graduate CSUN students.
- 2. The first complete and correct solution will be awarded a five dollar prize.
- 3. The winner solution and the names of the authors of all correct solutions will be published in our web site (**www.csun.edu/math/probweek**). All authors whose solutions are complete and correct will receive certificates.
- 4. All solutions must be typed and sent electronically. PDF, Latex, or Word files are preferred.
- 5. All steps of the solution must be clearly justified.
- Email your solution with subject "Problem of the week" to Bernardo.Abrego@csun.edu.
- 7. Late solutions will not be considered.
- 8. For any questions contact the organizers Bernardo.Abrego@csun.edu, Silvia.Fernandez@csun.edu

If you like puzzles and challenging problems ... join the Mathematics Department Problem Solving Workshop. We meet every Friday at 2:00 PM in FOB room 108. For more information visit our web site: www.csun.edu/math/workshop.