

Homework Problems Math 215

1. Write a truth table for
  - a)  $\text{not}(P \text{ or } Q)$
  - b)  $\text{not}(P \text{ and } Q)$
  - c)  $P \text{ or not } Q$
  
2. Which of the following statements is the negation of the statement that there is a student who got a perfect score on every test in the class?
  - a) there is a student who got a 0 on every test
  - b) all students got perfect scores on every test
  - c) no student got a perfect score on every test
  - d) every student missed some points on some test
  
3. Which of the following implications is true?
  - $n^2 + n - 2 = 0$  implies  $n = -2$  or  $n = 1$
  - $n^2 + n - 2 = 0$  implies  $n = -2$
  - $n^2 + n - 2 = 0$  implies  $n = 2$  and  $n = 1$ .