	Quiz 1	
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Your NAME:		
ID#:		
1. (6 pts.) Determine wheather [$[(p \to q) \land (q \to r)] \to (p \to r)$ is a tautology.	

3. (10 pts.) In your homework you showed that at least one of the real numbers a_1, a_2, \ldots, a_n is greater than or equal to the average of these numbers. Use that result to show the following: if the first 10 positive integers are placed around a circle, in any order, there exist three integers in consecutive locations around the circle that have a sum greater than or equal to 17.

2. (4 pts.) What are the domain and the range of the function that assigns to each positive integer n

the largest integer not exceeding the square root of n?