NCAAPMT Calculus Challenge Problem #1

Write all integers 1-50 using the integers 1, 9, 7, 9 exactly once and in that order. For example,

$$1 = 1^{979}$$
$$2 = 1 + \sqrt[9]{\left\lceil \tfrac{7}{9} \right\rceil}$$
$$3 = (1)^9 + |7 - 9|$$
$$4 = \left(1^9\right)^7 + \sqrt{9}$$

You may use all standard arithmetic operations, but you cannot use any other numbers (such as e or π). Scoring is 3 points for the integers 1-30, 1 additional point for 31-40, another point for 41-50. The class with the largest list of consecutive integers receives one additional point.

A solution to this problem will be posted on September 17, 2007.