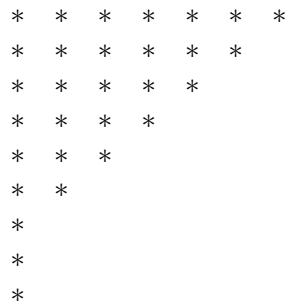


**Solutions to Attendance Quiz # 21 for Dr. Z.'s Number Theory Course for Nov. 18, 2013**

1. For the following partition  $\lambda$ , (i) Draw the Ferrers graph (ii) Find the conjugate partition  $\lambda'$

$$\lambda = (7, 6, 5, 4, 3, 2, 1, 1, 1)$$

**Sol. to 1:** (i)



(ii)  $(9, 6, 5, 4, 3, 2, 1)$

2. Write the following partitions in exponent notation. First the short version, then the long version (with zero exponents)  $\lambda = (7, 5, 3, 3, 3, 1, 1, 1, 1)$

**Sol. to 2:**

$$1^5 3^3 5^1 7^1 .$$

$$1^5 2^0 3^3 4^0 5^1 6^0 7^1 .$$