

Attendance Quiz for Lecture 3

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1. How many edges are there in each of the following graphs

(i) K_{13} (ii) $K_{11,13}$ (iii) Q_{10} (iv) W_{1001}

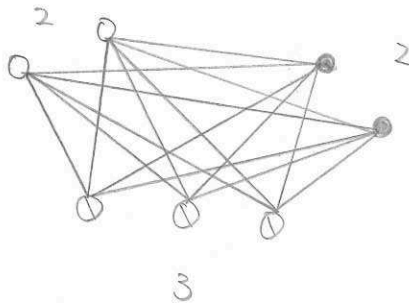
edges (i) # of $K_{13} = \frac{13(13-1)}{2}$ edges.

(ii) # of $K_{11,13} = 11 \times 13 = 143$ edges.

(iii) # of $Q_{10} = 10 \times 2^{10-1} = 10 \times 2^9$ edges.

(iv) # of $W_{1001} = 2(1001-1) = 2000$ edges.

2. Draw the complete tripartite graph $K_{2,2,3}$



3. Find the number of edges of $K_{a,b,c}$, where a, b, c are positive integers.

$$\# \text{ of edges of } K_{a,b,c} = ab + ac + bc$$