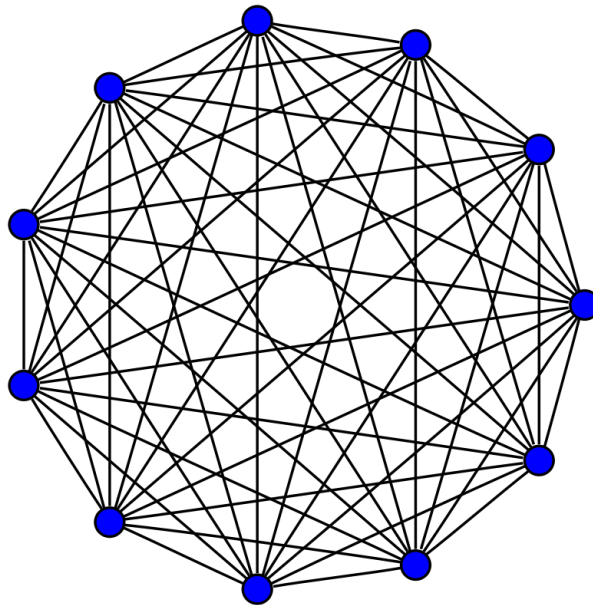


Here is a graph with 11 vertices, where **every pair of vertices is an edge** (this is called the “complete graph” on 11 vertices).



How many edges does this graph have?

(Note: HW1 has links to counting tutorials!)

(a) $11 \cdot 11 = 121$

(b) $11 \cdot 10 = 110$

(c) $2^{11} = 2048$

(d) $\binom{11}{2} = \frac{11 \cdot 10}{2} = 55$