

**MATH 61-02: WORKSHEET 10 (CH 7)**

- (W1) Suppose  $G$  is a simple graph (no loops) with  $|V(G)| = n$ . Show that if the degree of every vertex in  $G$  is at least  $\frac{n-1}{2}$ , then  $G$  is connected. (First convince yourself this is true for  $n = 2, 3, 4$ .)