

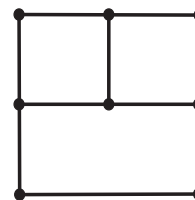
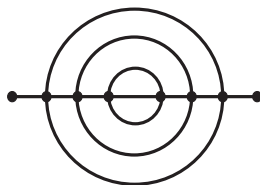
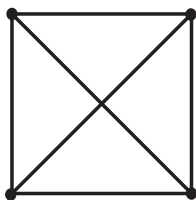
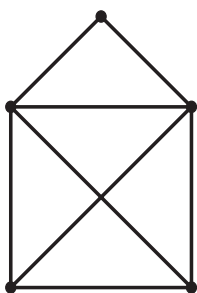
Playsheet 17

Graphs

MATH 130
Tuesday, April 21, 2009

Directions: Work together on each problem; do not delegate different problems to different people. Submit one **neatly written** write-up per group. Remember to use complete sentences as appropriate and to **show your work**.

1. For each graph below, label every vertex with its degree. (Note that only the dots count as vertices.)
2. Determine which of the following figures you can draw by following the rules below.
 - (a) You may not draw over any line more than once.
 - (b) You may not pick up your pencil.
 - (c) You may not draw any extra lines.



3. Generalize your results from problem 1: what properties does the figure need to have so that it can be drawn according to the rules? Be sure to explain your reasoning in complete sentences.

4. Draw a path of length 5 on the graph below.

