## UW Math Circle <br> January 29, 2015 <br> Homework

1. Suppose a knight is placed in the upper left hand corner of the chess board shown below. Is it possible to move the knight to the center square of the chess board after some number of moves?

2. Which of the following shapes can you trace, going over every side exactly once, without picking up your pencil from the paper?

3. Suppose you have a piece of wire that is 120 inches long. Without cutting the wire, can you bend it into the frame of a cube, each of whose edges is 10 inches long?
