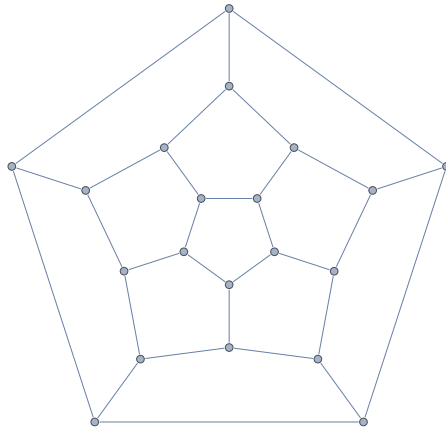
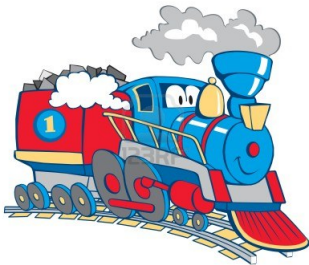


UW Math Circle
November 21, 2013
Week 9 Homework

1. Is it possible to trace this graph without ever lifting your pencil from the paper?



2. In Choo-Choo-Land, there is only one means of transportation: train. Twenty-one train lines serve the capital city of Thomastown. A single line serves the city of Farville, and each of the remaining cities is served by exactly 10 train lines (but we don't know how many other cities there are). Show that it is possible to travel from Thomastown to Farville by train (perhaps by transferring from one train line to another).



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?

