

Tracing worksheet

Name: _____
MA111-009
2011-03-09

A graph has dots called **vertices** and lines called **edges** between them. Each edge connects exactly two vertices. Make sure to draw in the dots so you can tell where one edge ends and the next begins, and so that you can tell if edges cross each other, or stop at a crossing point. We say that a graph can be **traced** if you can draw all the edges and vertices without lifting your pen or going over an edge more than the first time.

1. Draw a graph that you can trace.

2. Draw a graph that (incredibly) obviously cannot be traced.

3. Why can't your graph in #2 be traced?

4. Draw a graph that cannot be traced, but where it is not so obvious.

5. Why can't your graph in #2 be traced?

6. Draw a graph that can only be traced if you start or end at two specific vertices.

7. Draw a graph such that any attempt to trace it leaves at least two edges untraced.