

This miniproject asks you to investigate the concept of regular graphs. The definition of a regular graph is given just before problem #47 in the text.

Do the following problems.

- (a) Draw a 5-regular graph with eight vertices.
- (b) Draw a 4-regular graph with ten vertices.
- (c) Draw a fundamentally different 4-regular graph with ten vertices.
- (d) Problem #47 in section 9.2.
- (e) Problem #48 in section 9.2.
- (f) How many edges does a  $n$ -regular graph on  $v$  vertices have?
- (g) How many vertices does a  $n$ -regular graph with  $e$  edges have?