

Objectives

- Use algebraic tests to determine if the graph of a relation is symmetrical.
- Classify functions as even or odd.

Based on section 3.1 (pages 127 - 133), answer the following questions:

1. Define the following terms in your notes. Your definition should include the following: a definition, an example of a graph that satisfies the definition, and a way of testing whether a given relation satisfies the definition. (The table at the bottom of page 129 provides a nice example of how to organize this.)
 - (a) Point symmetry
 - (b) Symmetry with respect to the origin
 - (c) Line symmetry
 - (d) Symmetry with respect to the x-axis
 - (e) Symmetry with respect to the y-axis
 - (f) Symmetry with respect to the line $y = x$
 - (g) Symmetry with respect to the line $y = -x$
 - (h) Even functions
 - (i) Odd functions
2. Use your definitions to answer questions 14 - 26 on page 134. Be prepared to discuss your answers on Tuesday.