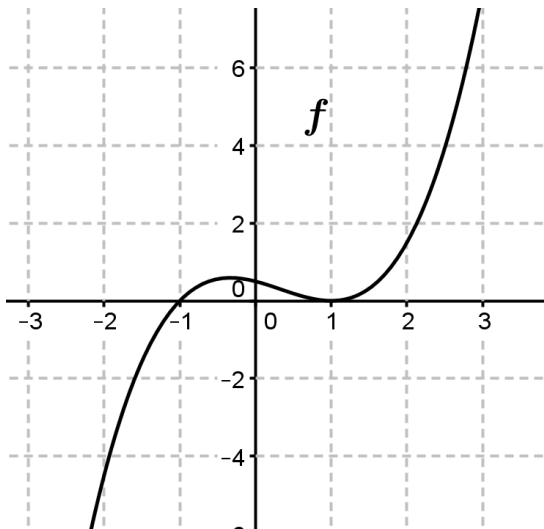**Polynomials 4 – Symbolic Representation from a Graph**

Homework #8

Name _____

Per _____ Date _____

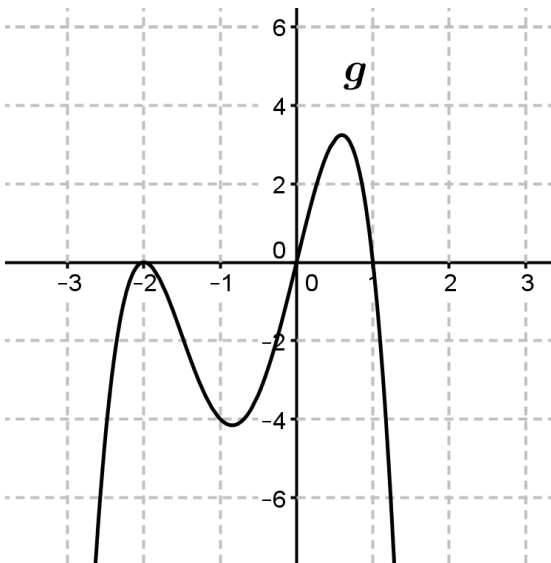Determine the possible symbolic representation for each of the polynomial functions whose graphs are provided below.

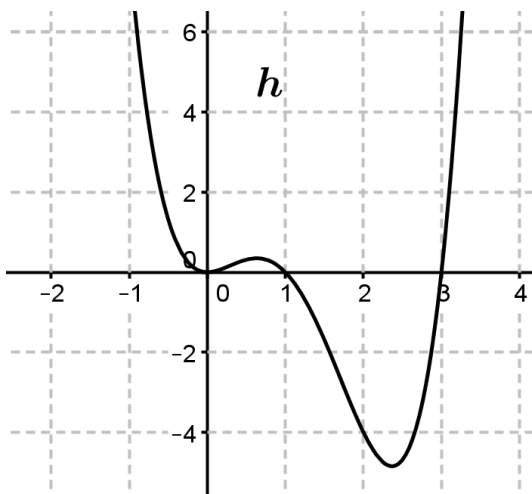- Check your answers to ensure the functions match the graphs at the intercepts and end-behavior.
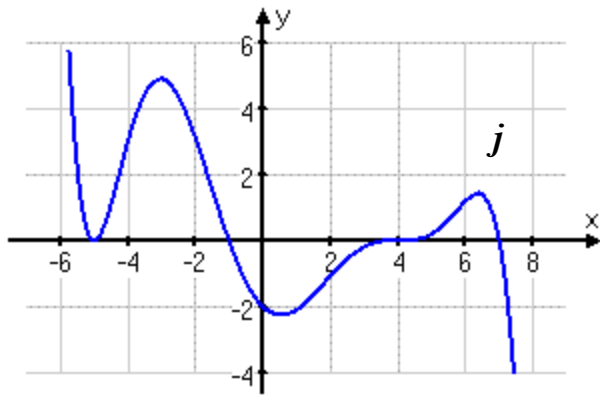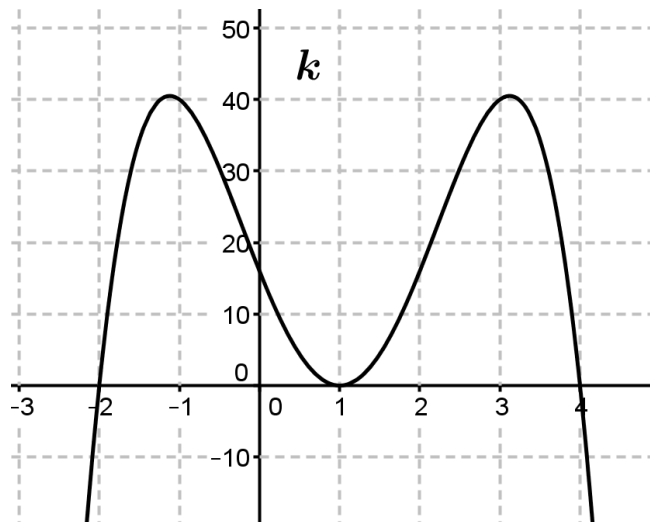
1.

$f(x) =$ _____

2.

$g(x) =$ _____

3.

$h(x) =$ _____

4.

$j(\text{x}) =$ _____

5. Which of the following statements must be true about the polynomial function k, whose graph is given? Mark each statement true (T) or false (F).

A. _____ $(x - 2)$ is a factor of k B. _____ $(x - 1)$ is a factor of k

C. _____ $k(-2) = 4$ D. _____ $k(4) = 0$

E. _____ $(x - 1)$ is a repeated factor of k, with even multiplicity

F. Find the possible symbolic representation: $k(\text{x}) =$ _____