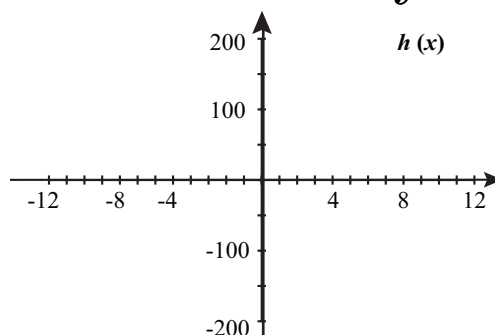
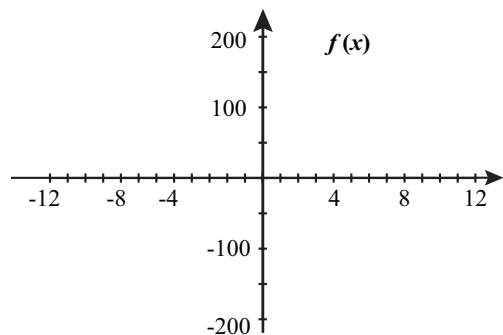


# Handout 2-Understand the Relationship Between Zeros and Factors of Polynomials



- Find the remainder when  $x^2 - 3x - 14$  is divided by  $x - 1$ .
- Find the remainder when  $5x^2 - 2x - 7$  is divided by  $x + 2$ .
- Find the remainder when  $2x^3 - x^2 - 3x - 3$  is divided by  $x - 3$ .
- Find all zeros of  $P(x) = (x - 5)(x + 4)(x - 1)$ .
- Write a polynomial with zeros of -2, 1, and 4.
- Find all zeros of  $x^3 - x^2 - 64x + 64$ .
- Find all zeros of  $x^3 - 8x^2 + 17x - 10$ .
- Find all zeros of  $x^3 + x^2 - 14x - 24$ .
- Graph  $f(x) = x^3 - 8x^2 - 13x - 10$ .
- Graph  $h(x) = x^3 + x^2 - 14x - 24$ .