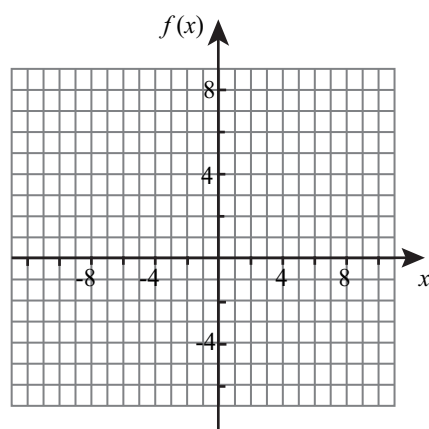
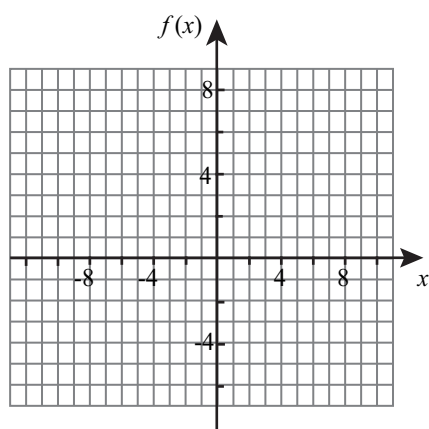


Arithmetic with Polynomials - Worksheet 3



Graph of $f(x) = x^2 - 7x + 12$



Graph of $f(x) = x^3 - 2x^2 - 8x$

1. What are the x -intercepts of the function $f(x) = x^2 - 7x + 12$?
2. Draw a rough graph of the function $f(x) = x^2 - 7x + 12$.
3. What are the x -intercepts of the function $f(x) = x^3 - 2x^2 - 8x$?
4. Draw a rough graph of the function $f(x) = x^3 - 2x^2 - 8x$.
5. Find the x -intercepts of the polynomial $x^3 - x^2 - 9x + 9$.
6. Find the y -intercepts of the polynomial $x^3 - x^2 - 9x + 9$.
7. Find the x -intercepts of the polynomial $x^4 - x^2$.
8. Do we expect the polynomial $x^4 - x^2$ to be facing up or down? Why?
9. Find the x -intercepts of the polynomial $-x^2 + 16$.
10. Do we expect the polynomial $-x^2 + 16$ to be facing up or down? Why?