## **Solving Polynomials by Factoring**

Use the zero product property to solve the factored polynomial

1) 
$$f(x) = (x+3)(x-1)(3x+5)$$

2) 
$$y = (x^2 + 2)(x - 4)$$

3) 
$$f(x) = (x^2 - 3)(2x + 9)(x - 7)$$

Solve the polynomials by factoring

4) 
$$f(x) = 2x^3 - 3x^2 - 10x + 15$$

$$5) y = x^3 + 3x^2 - 2x - 6$$

6) 
$$f(x) = x^3 - 8$$