Polynomial Functions

Question

Which of the following polynomials has exactly 3 distinct, real roots?

(a) $x(x+1)(x^2+1)$

(b) $(x^2+1)(x^2-1)$

(c) $x^2(x-2)(x+1)$

(d) x^4-4.

Answer: (c) Elicit conversation on determining which polynomials may be factored over set of real numbers and on repeated roots.