Polynomial Functions

Question

(

For which integer values of a, b, c and d will the the polynomial $ax^3 + bx^2 + cx + d$ have three distinct roots?

a = 1,
$$b = 2, c = 4, d = 8$$

b
$$a = 1, b = 2, c = -4, d = -8$$

9
$$a = 2, b = 2, c = 4, d = 4$$

