Find the critical numbers of the function $y = f(x) = (x+5)^2(x+5) - 3x$

FEEDBACK By definition, a **critical number** c is a number in the domain of f such that $f'(c) = 0$ or $f'(c)$ is undefined.
Since f is a polynomial, the domain of f is $D_f = (-\infty, \infty)$.
Furthermore, $f'(x)$ is defined for all values of x. Thus, to find the critical numbers of f it is only necessary to solve $f'(x) = 0$.
DIRECTIONS Write your answer using set notation; for example, $\{1, 2, 3\}$ or $\{-3, -2, 5\}$.
Use curly braces, no spaces, commas separating the elements, and the elements in increasing order. No spaces.

ANSWER: $\{-6, -4\}$