The fifth part of a number when increased by 5 equals its fourth part decreased by 5. Find the number.

ANSWER:

Let the number be x.

Then, we have:

$\Rightarrow \frac{x}{5} + 5 = \frac{x}{4} - 5$

$\Rightarrow \frac{x}{5} - \frac{x}{4} = -5 - 5$

$\Rightarrow \frac{-x}{20} = -10$

$\Rightarrow x = 200$

$\therefore$ The required number is 200.