

Answer on Question #84517 – Math – Combinatorics | Number Theory

Question

$2018^{2019} - 20119^{2018}$ divided by 5 what is the remainder?

Solution

$$2018^{2019} - 20119^{2018} \equiv 8^{2019} - 9^{2018} \equiv 3^{2019} - 81^{1024} \equiv 3^{2016+3} - 1^{1024} \equiv 3^3 - 1 \equiv 1$$

Answer: The remainder is 1.