5.) Yasmine examines the expression $\frac{3^{-m}}{3^m}$, where m is greater than 0. She claims that the expression has a value equal to 1 because it simplifies to 3^0, and any integer to the 0 power is 1.
Is Yasmine correct? Explain why or why not.

Claim:

Yasmine's answer is not correct.

Evidence:

The quotient rule says that when dividing exponents with the same base, you keep the base, and subtract the exponents.

Reasoning:

If we put a number in for m, we get

$\frac{3^{-3}}{3^3} = 3^{-3-3} = 3^{-6}$

3^{-6} does not equal 3^0 so the answer is not 1.