

Evaluation of Proof Exercise

Following the instructions for [\(linked\)](#) *Evaluation of Proofs* exercises (which also are posted on the course homework page), evaluate the below justification of the given conjecture.

►. **Conjecture D.** For all positive integers a , b , and c , we have that $(a^b)^c = a^{(b^c)}$.

This conjecture is false as is shown by the following counterexample: If we let $a = 2$, $b = 3$, and $c = 2$, then

$$(a^b)^c = a^{(b^c)} \tag{1}$$

$$(2^3)^2 = 2^{(3^2)} \tag{2}$$

$$8^2 = 2^9 \tag{3}$$

$$64 \neq 512 \tag{4}$$

.....
DELETE this whole sentence and THEN put your answer to ALL parts down here.