

Topic: Zero as an exponent**Question:** Simplify the expression.

$$1,000^0$$

Answer choices:

A 1,000

B 100

C 1

D 0



Solution: C

We know that any nonzero number raised to the power 0 is equal to 1, so

$$1,000^0 = 1$$



Topic: Zero as an exponent**Question:** Simplify the expression.

$$x^0$$

Answer choices:

A 0

B 1

C 2

D 3



Solution: B

We know that any variable raised to the power 0 is equal to 1 (as long as the value of the expression isn't 0), so

$$x^0 = 1$$

This result assumes that $x \neq 0$.



Topic: Zero as an exponent**Question:** Simplify the expression.

$$(x + 1)^0$$

Answer choices:

A 0

B 1

C x

D x^1



Solution: B

We know that any expression raised to the power 0 is equal to 1 (as long as the value of the expression isn't 0), so

$$(x + 1)^0 = 1$$

This assumes that $x + 1 \neq 0$, which means that $x \neq -1$.

