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 of 0 is 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 nonzero number raised to the power of 0 is 1, 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 nonzero number raised to the power of 0 is 1, so

$$(x + 1)^0$$

1

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

