Topic: Division of zero

Question: Which equation is false?

Answer choices:

A $1 \cdot 0 = 0$

B $\dfrac{1}{0} = 0$

C $\dfrac{0}{1} = 0$

D $0 \cdot 1 = 0$

Solution: B

A fraction is always undefined if the denominator is equal to 0, so the equation in answer choice B is false because it implies that we *can* divide 1 by 0 (and that the result of that division is 0).

Topic: Division of zero

Question: Evaluate the expression.

$$\frac{110}{0}$$

Answer choices:

A   0

B   Not defined

C   1

D   110

Solution: B

A fraction is always undefined if the denominator is equal to 0, so the answer is B.

Topic: Division of zero

Question: Which fraction is undefined?

Answer choices:

A $\dfrac{0}{5}$

B $\dfrac{0}{-3}$

C $\dfrac{5}{0}$

D $\dfrac{3}{0.1}$

Solution: C

In math, dividing by 0 makes a fraction undefined, so the fraction in answer choice C is undefined. All of the other answer choices are defined, because having 0 in the numerator just results in the real number answer of 0.