

Name:

Quiz 2

Instructions: Answer all of the questions as best as you can. Show all your work and make it clear what your answer is. Calculators are allowed, but not graphing calculators.

1. When Luke blew up the Death Star, the number of Imperial Troops decreased by 17%. If there were 182 million Imperial Troops after the Death Star exploded, how many troops did the Empire have before?

2. Real estate prices in Guatemala are very reasonable. It only costs 210,000 quetzals to purchase one square kilometer of land. How much does land cost in US dollars per square mile?

(1 mile = 1.61 km and 1 US dollar = 7.94 quetzals)

3. Consider the following deductive argument.

Polar bears that do not hibernate feed on human beings.
Walter is a polar bear that always hibernates.
Therefore, Walter does not eat human beings.

(a) Determine whether the argument is valid or invalid using a Venn diagram.

(b) If the argument is valid, is the argument sound? Why?