



Inference

- There is a total of 138 quokkas in this particular forest
Answer: No

This is not necessarily true, since there could be far more or far less.

We are not accounting for:

1. Animals that were not spotted by a researcher, since they did not appear in a region in any morning. Hence, the count could be far higher.
2. Animals that moved around and were counted in the counts for two areas.

- Assuming that wallabies do not move across areas, on average, there are approximately 18.4 wallabies spotted in one region in one morning across a period of 2 months.
Answer: Yes

This follows, since there are a total of $23 + 21 + 14 + 18 + 16 = 92$ wallabies spotted total across the 5 areas. This is truly the amount seen, since the wallabies do not move across areas. Hence, there are $92/5 = 18.4$ wallabies in one region in one morning across a period of 2 months.



Inference

Assuming mating does not occur and animals do not migrate into the forest, within the next 15 years, a majority of quokkas in the forest can be assumed to have died.

Answer: Yes

This is true. Since on average the lifespan of a quokka is 50% lower than that of a wallaby. A wallaby lives for 15 years on average, and hence a quokka lives for 7.5 years on average. A majority of quokkas hence would be dead at that point, since there are no new quokkas being introduced into the population. Hence, the majority of quokkas in the forest can be assumed to have died.

In 15 years, we can expect the numbers of quokkas to be far lower than the numbers of wallabies.

Answer: No

This is not necessarily true. Unlike in the previous statement, we have no proof that mating does not occur, and animals do not migrate into the forest. Furthermore, the number of quokkas is greater than the number of wallabies. Hence, we cannot determine the amounts of each species left.



Inference

● Extinction is affecting wallabies and quokkas the most out of any species in the forest

Answer: Yes

This is true. The stem states: "there are many species of animals in a forest, of which the wallaby and the quokka are the closest to being driven to extinction." Hence, this statement is true, as it is stated in the premise.