

Gorilla population challenge: answers

Variables which will affect the lowland gorilla population.

Work out the percentages based on an estimated population of 150,000.

	What will the population be in 1 year?	What will the population be in 2 years?	What will the population be in 3 years?
<p>If 10% of the population is killed every year by hunting.</p> <p><i>(Calculation: 150,000 divided by 100, multiplied by 10 then subtract this from 150,000. Repeat for the population total after 1 and then 2 years)</i></p>	135,000	121,500	109,350
<p>If 20% of the population dies every year because of the Ebola virus.</p> <p><i>(Calculation: 150,000 divided by 100, multiplied by 20 then subtract this from 150,000. Repeat for the population total after 1 and then 2 years)</i></p>	120,000	96,000	76,800
<p>If the population rises by 4% every year.</p> <p><i>(Calculation: 150,000 divided by 100, multiplied by 4 then add this to 150,000. Repeat for population total after 1 and then 2 years)</i></p>	156,000	162,240	168,729.6 168,730 when rounded

Variables which will affect the lowland gorilla population.

Work out the percentages based on 50,000,000 acres of forest.

	How many acres will there be in 1 year?	How many acres will there be in 2 years?	How many acres will there be in 3 years?
<p>If 10% of the forest is cut down every year.</p> <p><i>(Calculation: 50,000,000 divided by 100, multiplied by 10 then subtract this from 50,000,000. Repeat this with the total forest area after 1 and 2 years)</i></p>	45,000,000	40,500,000	36,450,000
<p>If the forest is allowed to grow by 2% each year.</p> <p><i>(Calculation: 50,000,000 divided by 100, multiplied by 2 then add this to 50,000,000. Repeat this with the total forest area after 1 and 2 years)</i></p>	51,000,000	52,020,000	53,060,400
<p>If global warming creates a 4% decrease, per year, of rainforest surface area.</p> <p><i>(Calculation: 50,000,000 divided by 100, multiplied by 4, then subtract this from 50,000,000. Repeat for area after 1 then 2 years)</i></p>	48,000,000	46,080,000	44,236,800

Variables which will affect the lowland gorilla population.

Work out the percentages based on 10,000,000 acres of forest.

	How many acres will there be in 1 year?	How many acres will there be in 2 years?	How many acres will there be in 3 years?
If the protected forest area increases by 5% per year. <i>(Calculation: 10,000,000 divided by 100, multiplied by 5 then add this to 10,000,000. Repeat this for forest area in 1 and then 2 years)</i>	10,500,000	11,025,000	11,576,250
If the protected area decreases by 4% per year. <i>(Calculation: 10,000,000 divided by 100, multiplied by 4 then subtract this from 10,000,000. Repeat this for forest area in 1 and then 2 years)</i>	9,600,000	9,216,000	8,847,360