Answer on Question #49766 – Math – Algebra

Task:

Working separately, 3 teenagers can mow 3 lawns in 3 hours. At this rate, how many lawns can 6 teenagers mow in 9 hours?

Solution:

By statement of question, 3vt=3 lawns, where v is rate of one teenager, t is time of work, so

3v*3 hours=3 lawns, hence v=1/3 lawn/hour is a rate of one teenager, so working separately one teenager can mow 1 lawn in 3 hours; at this rate 6 teenagers can mow 6 lawn in 3 hours, I.e. 18 lawn in 9 hours, because 6vT=6*1/3*9=54/3=18 lawns in 9 hours.

Answer: 18 lawns.