A pitfall trap was left for 24 hours and 20 beetles were trapped. Each was marked and then released. After a few days the trap was used again and this time 24 beetles were trapped. 6 had marks. Use the formula below to estimate the population of beetles.

$$\text{population size} = \frac{\text{number in 1st sample} \times \text{number in 2nd sample}}{\text{number in 2nd sample previously marked}}$$