



Problem of the Week

Problem B

Traffic Predictions

Petr was standing at the bus stop during rush hour and started counting the passing vehicles. In the first five minutes he waited, he counted 20 cars, 25 vans and 15 trucks.



- (a) Based on Petr's sample data, what is the theoretical probability that the next vehicle will be a truck?
- (b) Petr counted vehicles for another five minutes and discovered that the experimental probability of a vehicle being a car was the same for his first and second samples. If Petr counted a total of 84 vehicles in his second sample, how many of those vehicles were cars?