4 Gio has a pack of 18 cards. Ivy has a pack of x cards.

Each card has a picture of a bus or a car or a train. The number of cards with each picture in the two packs is shown in the table.

	Bus	Car	Train
Gio's pack	6	10	2
Ivy's pack	$x-12$	9	3

One card is chosen at random from each pack. The probability that the two cards have pictures of buses on them is equal to twice the probability that the two cards have pictures of cars on them.

(a) Write down an equation in terms of x and hence find the value of x. [4]

(b) Find the probability that the two cards have pictures of the same type of vehicle on them. [3]