Fill in the Blanks Tree Diagrams for Independent Events

Question	Tree Diagram	Probability
Two students, Maria and Maysoon each sit their driving theory exam. Complete the tree diagram and calculate the probability of each outcome.	Maria Pass Pass Fail Fail Fail Fail	$P(PP) = \times =$
		$P(PF) = \times =$
		$P(FP) = \times =$
		$P(FF) = 0.6 \times 0.6 = 0.36$
A biased coin is tossed once and then tossed again for a second time. Complete the tree diagram and calculate the probability of each outcome.	Second First Heads Tails Heads Tails Tails	$P(HH) = 0.2 \times = 0.04$
		$P(HT) = \times =$
		$P(TH) = \times =$
		$P(TT) = \times =$
A car travels through two sets of traffic lights. The probability of stopping at each set is the same. Complete the tree diagram and calculate the probability of each outcome.		$P(SS) = \times =$
		$P(SG) = \frac{3}{7} \times =$
		$P(GS) = \times =$
		$P(GG) = \times =$
There are 12 red or blue balls in a box. There are more blue balls than red balls. A ball is removed at random, the colour recorded, then replaced. A second ball is then		$P(RR) = \times =$
		$P(RB) = \times = \frac{35}{144}$
		$P(BR) = \times =$
removed. Complete the tree diagram and probabilities.		$P(BB) = \times =$