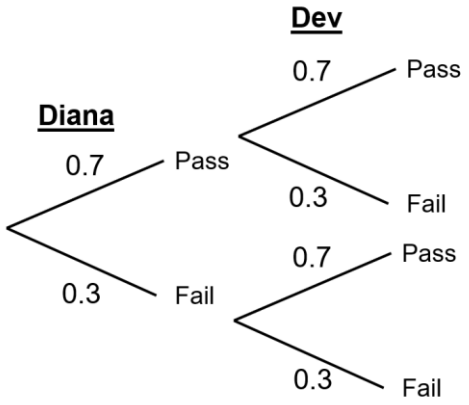
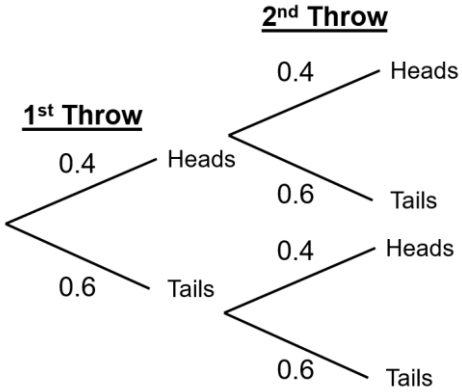
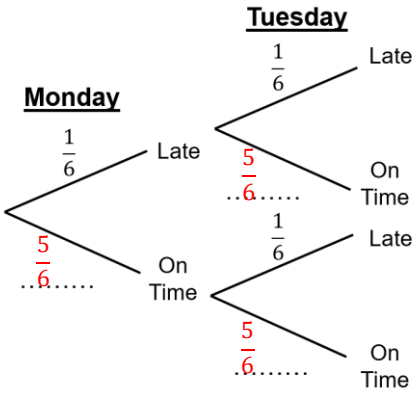
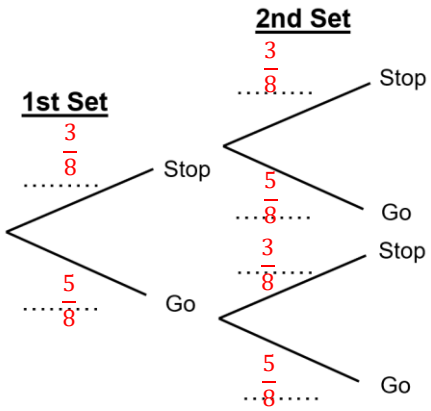
Fill In The Blanks...

Tree Diagrams for Independent Events

Question	Tree Diagram	Probability	
The probability of passing a music exam is 0.7. Diana and Dev both sit the music exam. Complete the tree diagram and calculate the probability of each outcome.		$P(PF) = 0.7 \times 0.7 =$	0.49
		$P(PF) = 0.7 \times 0.3 =$	0.21
		$P(FP) = 0.3 \times 0.7 =$	0.21
		$P(FF) = 0.3 \times 0.3 =$	0.09
The probability of a biased coin landing on tails is 0.4. The coin is tossed twice. Complete the tree diagram and calculate the probability of each outcome.		$P(HH) = 0.4 \times 0.4 =$	0.16
		$P(HT) = 0.4 \times 0.6 =$	0.24
		$P(TH) = 0.6 \times 0.4 =$	0.24
		$P(TT) = 0.6 \times 0.6 =$	0.36
The probability of Abby being late for work is $\frac{1}{6}$. Abby works Monday and Tuesday. Complete the tree diagram and calculate the probability of each outcome.		$P(LL) = \frac{1}{6} \times \frac{1}{6} =$	$\frac{1}{36}$
		$P(LO) = \frac{1}{6} \times \frac{5}{6} =$	$\frac{5}{36}$
		$P(OL) = \frac{5}{6} \times \frac{1}{6} =$	$\frac{5}{36}$
		$P(OO) = \frac{5}{6} \times \frac{5}{6} =$	$\frac{25}{36}$
The probability of stopping at traffic lights is $\frac{3}{8}$. Jameela drives through two sets of traffic lights. Complete the tree diagram and calculate the probability of each outcome.		$P(SS) = \frac{3}{8} \times \frac{3}{8} =$	$\frac{9}{64}$
		$P(SG) = \frac{3}{8} \times \frac{5}{8} =$	$\frac{15}{64}$
		$P(GS) = \frac{5}{8} \times \frac{3}{8} =$	$\frac{15}{64}$
		$P(GG) = \frac{5}{8} \times \frac{5}{8} =$	$\frac{25}{64}$