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. | Diana | $P(P P)=0.7 \times 0.7=$ | 0.49 |
|  |  | $P(P F)=0.7 \times 0.3=$ |  |
|  | $0.7 \text { Pass }$ | $P(F P)=0.3 \times 0.7=$ |  |
|  | $0.3>\text { Fail }$ | $P(F F)=0.3 \times 0.3=$ |  |
| 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. |  | $P(H H)=0.4 \times 0.4=$ |  |
|  |  | $P(H T)=\times=$ |  |
|  |  | $P(T H)=\times=$ |  |
|  |  | $P(T T)=\times=$ |  |
| 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. |  | $P(L L)=\times=$ |  |
|  |  | $P(L O)=\times=$ |  |
|  |  | $P(O L)=\times=$ |  |
|  |  | $P(O O)=\times=$ |  |
| 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. | 1st Set |  |  |
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