Fill in the Blanks Tree Diagrams for Dependent Events

| Question | Tree Diagram | Probability |  |
| :---: | :---: | :---: | :---: |
| There are 6 red balls and 4 green balls in a bag. Two balls are chosen at random. Complete the tree diagram and calculate the probability of each outcome. | 1st Ball $\frac{\text { 2nd Ball }}{\frac{5}{9}}$ | $P(R R)=\frac{6}{10} \times \frac{5}{9}=$ | $\frac{30}{90}$ |
|  |  | $P(R G)=\frac{6}{10} \times \frac{4}{9}=$ | $\frac{24}{90}$ |
|  |  | $P(G R)=\times=$ |  |
|  |  | $P(G G)=\times=$ |  |
| There are 6 boys and 5 girls in a football team. Two team members are chosen at random. Complete the tree diagram and calculate the probability of each outcome. |  | $P(B B)=\times=$ |  |
|  |  | $P(B G)=\times=$ |  |
|  |  | $P(G B)=\times=$ |  |
|  |  | $P(G G)=\times=$ |  |
| There are 4 donuts and 3 cookies in a tin. Riaz chooses two treats at random. Complete the tree diagram and calculate the probability of each outcome. |  | $P(D D)=\times$ |  |
|  |  | $P(D C)=\times$ |  |
|  |  | $P(C D)=\times$ |  |
|  |  | $P(C C)=\times$ |  |
| There are 7 blue pens and 5 red pens in a pencil case. Two pens are chosen at random. Complete the tree diagram and calculate the probability of each outcome. |  | $P(B B)=$ |  |
|  |  | $P(B R)=$ |  |
|  |  | $P(R B)=$ |  |
|  |  | $P(R R)=$ |  |

