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| **Fill in the Blanks** | **Tree Diagrams for Dependent Events** |

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| **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. |  | $$P\left(RR\right)= \frac{6}{10} × \frac{5}{9} =$$ | $$\frac{30}{90}$$ |
| $$P\left(RG\right)= \frac{6}{10} × \frac{4}{9} =$$ | $$\frac{24}{90}$$ |
| $$P\left(GR\right)= × =$$ |  |
| $$P\left(GG\right)= × =$$ |  |
| 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. |  | $$P\left(BB\right)= × =$$ |  |
| $$P\left(BG\right)= × =$$ |  |
| $$P\left(GB\right)= × =$$ |  |
| $$P\left(GG\right)= × = $$ |  |
| 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. |  | $$P\left(DD\right)= × =$$ |  |
| $$P\left(DC\right)= × =$$ |  |
| $$P\left(CD\right)= × =$$ |  |
| $$P\left(CC\right)= × =$$ |  |
| 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. |  | $$P\left(BB\right)=$$ |  |
| $$P\left(BR\right)=$$ |  |
| $$P\left(RB\right)=$$ |  |
| $$P\left(RR\right)=$$ |  |