**Probability - Dependent Events**

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| **1)** The tree diagram below shows the outcomes of choosing two marbles out of a jar that contains 3 red marbles and 5 yellow marbles.Find the probability of that one marble is yellow and the other is red.      http://www.mathster.com/course/simgs/33773496792_1.png      | [1]   |
| **2)** The tree diagram below shows the outcomes of choosing and eating two chocolates from a box containing 7 white chocolates, 3 orange chocolates and 5 nut chocolates.Find the probability of eating one white and one orange chocolate.      http://www.mathster.com/course/simgs/33773496792_2.png      | [1]   |
| **3)** The tree diagram below shows the outcomes of selecting three beads from a box containing 3 pink beads and 6 red beads.Note that a bead is *not replaced* before the next is selected.Find the probability of picking one pink and two red beads.      http://www.mathster.com/course/simgs/33773496792_3.png      | [1]   |
| **4)** The tree diagram below shows the outcomes of choosing and eating three chocolates from a box containing 4 orange chocolates and 5 mint chocolates.Find the probability of eating three orange chocolates.      http://www.mathster.com/course/simgs/33773496792_4.png      | [1]   |
| **5)** A jar contains 2 green marbles and 5 purple marbles. Aidan randomly selects 2 marbles at the same time.Draw a tree diagram and use it to calculate the probability that one marble is purple and the other is green.      | [1]   |
| **6)** A box contains 3 raisin chocolates, 5 milk chocolates and 7 nut chocolates.Draw a tree diagram and use it to calculate the probability of eating one milk and one nut chocolate.      | [1]   |
| **7)** Skye selected three beads from a bag containing 5 white beads and 6 green beads. She did *not replaced* any of the balls before the next was selected.Calculate the probability that she picked three green beads.      | [1]   |
| **8)** The outcomes of selecting three chocolates from a box containing 5 raisin chocolates and 3 dark chocolates without replacement.Draw a tree diagram and use it to calculate the probability of picking one raisin and two dark chocolates.      | [1]   |

**Solutions for the assessment Probability - Dependent Events**

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| **1)** P(one marble is yellow and the other is red) = 15/28 | **2)** P(one white and one orange chocolate) = 1/5 |
| **3)** P(one P and two R) = 15/28 | **4)** P(3O) = 1/21 |
| **5)** P(one marble is purple and the other is green) = 10/21http://www.mathster.com/course/simgs/33773496792_5.png |
| **6)** P(one milk and one nut chocolate) = 1/3http://www.mathster.com/course/simgs/33773496792_6.png |
| **7)** P(3G) = 4/33http://www.mathster.com/course/simgs/33773496792_7.png |
| **8)** P(one R and two D) = 15/56http://www.mathster.com/course/simgs/33773496792_8.png |