**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) = 10/21 http://www.mathster.com/course/simgs/33773496792_5.png | |
| **6)** P(one milk and one nut chocolate) = 1/3 http://www.mathster.com/course/simgs/33773496792_6.png | |
| **7)** P(3G) = 4/33 http://www.mathster.com/course/simgs/33773496792_7.png | |
| **8)** P(one R and two D) = 15/56 http://www.mathster.com/course/simgs/33773496792_8.png | |