

Name _____

Compound Probability

Problem 1: Today in gym class, you were learning to play tennis. All that was left when it was your turn to choose were three white balls and one orange ball. You also had the choice of two metal rackets and one wooden one. Fill in the area model below to figure the probability of each compound event.

Box A will tell you the probability of getting a white ball and a wooden racket.

$P(\text{white ball and wooden racket}) =$ _____

	Probability of white ball is _____	Probability of orange ball is _____
Probability of wooden racket is _____	A	B
Probability of metal racket is _____	C	D

Box B = $P(\text{_____}, \text{_____}) =$ _____

Box C = $P(\text{_____}, \text{_____}) =$ _____

Box D = $P(\text{_____}, \text{_____}) =$ _____

Problem 2: Michael wants to buy his girlfriend some flowers for her birthday. The problems are that he doesn't know what kind of flowers she likes and he only has enough money for two flowers. There are two vases with flowers in the store. Michael closes his eyes and picks one flower from each vase. Vase 1 has three red roses and two yellow roses. Vase 2 has three white carnations and one red carnation. Determine the probability of each outcome by creating an area model like the one above.