

Lesson 3 Homework Practice

Probability of Compound Events

For each situation, find the sample space using a tree diagram.

- choosing blue, green, or yellow wall paint with white, beige, or gray curtains

- choosing a lunch consisting of a soup, salad, and sandwich from the menu shown in the table

Soup	Salad	Sandwich
Tortellini	Caesar	Roast Beef
Lentil	Macaroni	Ham
		Turkey

- GAME** Kimiko and Miko are playing a game in which each girl rolls a number cube. If the sum of the numbers is a prime number, then Miko wins. Otherwise Kimiko wins. Find the sample space. Then determine whether the game is fair.

Sum = 2	Sum = 3	Sum = 4	Sum = 5	Sum = 6	Sum = 7	Sum = 8	Sum = 9	Sum = 10	Sum = 11	Sum = 12
$1 + 1 = 2$	$2 + 1 = 3$ $1 + 2 = 3$	$1 + 3 = 4$ $2 + 2 = 4$ $3 + 1 = 4$	$1 + 4 = 5$ $2 + 3 = 5$ $3 + 2 = 5$ $4 + 1 = 5$	$1 + 5 = 6$ $2 + 4 = 6$ $3 + 3 = 6$ $4 + 2 = 6$ $5 + 1 = 6$	$1 + 6 = 7$ $2 + 5 = 7$ $3 + 4 = 7$ $4 + 3 = 7$ $5 + 2 = 7$ $6 + 1 = 7$	$2 + 6 = 8$ $3 + 5 = 8$ $4 + 4 = 8$ $5 + 3 = 8$ $6 + 2 = 8$	$3 + 6 = 9$ $4 + 5 = 9$ $5 + 4 = 9$ $6 + 3 = 9$	$4 + 6 = 10$ $5 + 5 = 10$ $6 + 4 = 10$	$5 + 6 = 11$ $6 + 5 = 11$	$6 + 6 = 12$

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