Probability With and Without Replacement Worksheets

REFERENCE / CASE 1

A bag contains 3 red and 4 blue counters. Each counter is equally likely on a random draw. Find the probability of two reds (a) replacing and mixing after the first draw, (b) without replacement.

Terracotta = red; green = blue



METHOD: Multiply the probability of red first by the conditional probability of red second. Without replacement after a red, both the red count and total decrease by one. Use the separate practice sheet before checking the answer.

Probability With and Without Replacement Worksheets

REFERENCE / CASE 2

A bag contains 4 red and 4 blue counters. Each counter is equally likely on a random draw. Find the probability of two reds (a) replacing and mixing after the first draw, (b) without replacement.

Terracotta = red; green = blue



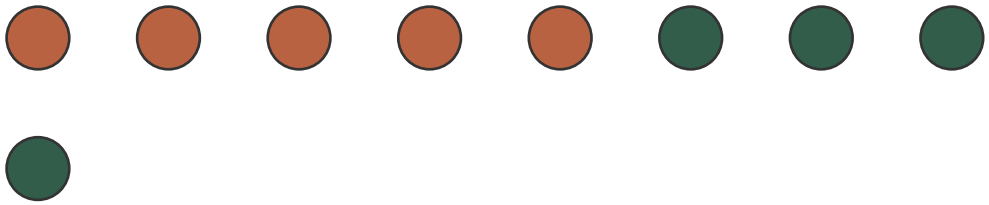
METHOD: Multiply the probability of red first by the conditional probability of red second. Without replacement after a red, both the red count and total decrease by one. Use the separate practice sheet before checking the answer.

Probability With and Without Replacement Worksheets

REFERENCE / CASE 3

A bag contains 5 red and 4 blue counters. Each counter is equally likely on a random draw. Find the probability of two reds (a) replacing and mixing after the first draw, (b) without replacement.

Terracotta = red; green = blue



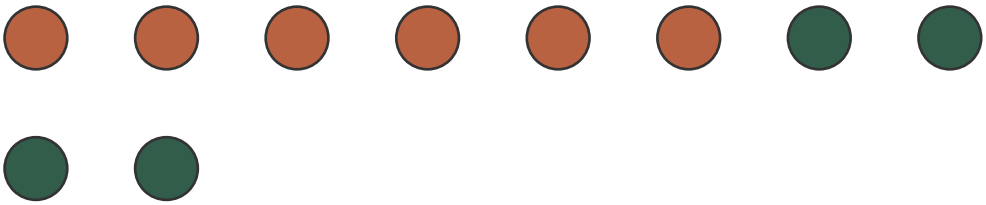
METHOD: Multiply the probability of red first by the conditional probability of red second. Without replacement after a red, both the red count and total decrease by one. Use the separate practice sheet before checking the answer.

Probability With and Without Replacement Worksheets

REFERENCE / CASE 4

A bag contains 6 red and 4 blue counters. Each counter is equally likely on a random draw. Find the probability of two reds (a) replacing and mixing after the first draw, (b) without replacement.

Terracotta = red; green = blue



METHOD: Multiply the probability of red first by the conditional probability of red second. Without replacement after a red, both the red count and total decrease by one. Use the separate practice sheet before checking the answer.