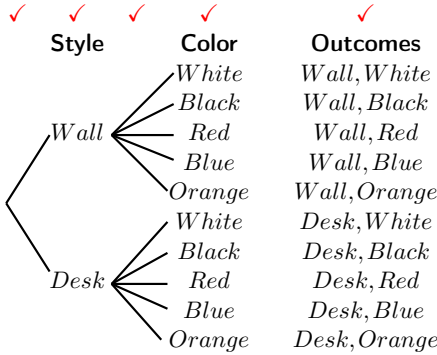


Fundamental Principle of Counting

Total points = 67

A.

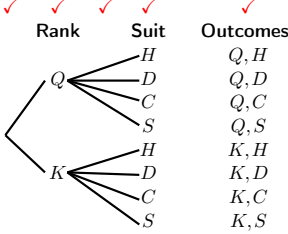
1.



10 possible outcomes

$2 \times 5 = 10$ possible outcomes

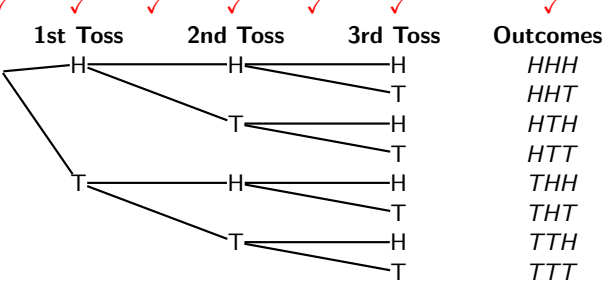
2.



8 possible outcomes

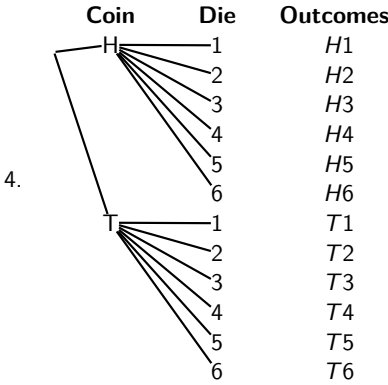
$2 \times 4 = 8$ possible outcomes

3.



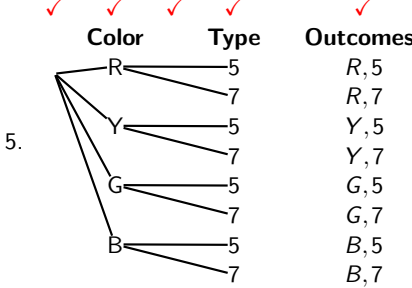
8 possible outcomes

$2 \times 2 \times 2 = 8$ possible outcomes



12 possible outcomes

$2 \times 6 = 12$ possible outcomes



8 possible outcomes

$4 \times 2 = 8$ possible outcomes

B.

1. $4 \times 2 \times 8 = 64$ possible combinations

2. $5 \times 4 \times 3 \times 2 \times 1 = 120$ ways

3. $4 \times 3 \times 2 = 24$ outfits

4. $2 \times 4 \times 7 = 56$ salads

5. a. $26 \times 26 \times 10 \times 10 \times 10 \times 10 = 6,760,000$ license plates

b. $26 \times 25 \times 10 \times 9 \times 8 \times 7 = 3,276,000$ license plates

6. $9 \times 10 \times 10 \times 10 \times 10 = 90,000$ numbers

7. $4 \times 4 \times 3 \times 2 \times 1 = 96$ numbers

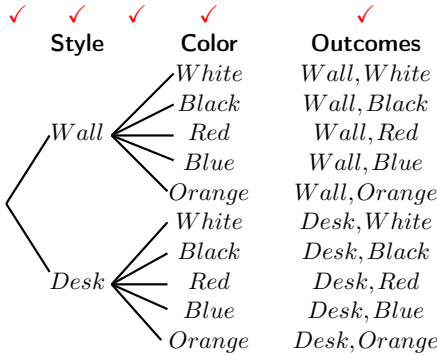
8. $6 \times 5 \times 4 \times 3 \times 2 \times 1 = 720$ ways

Fundamental Principle of Counting

Total points = 67

A.

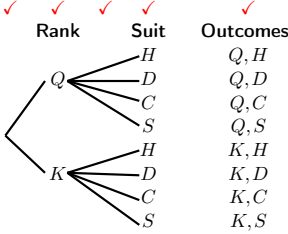
1.



10 possible outcomes

$2 \times 5 = 10$ possible outcomes

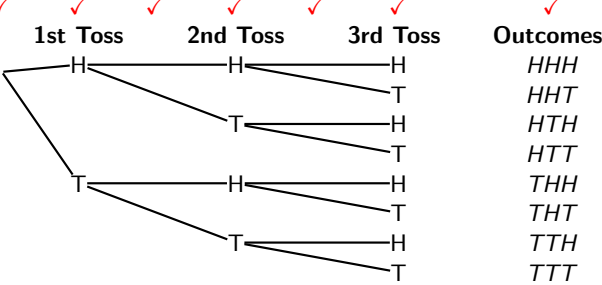
2.



8 possible outcomes

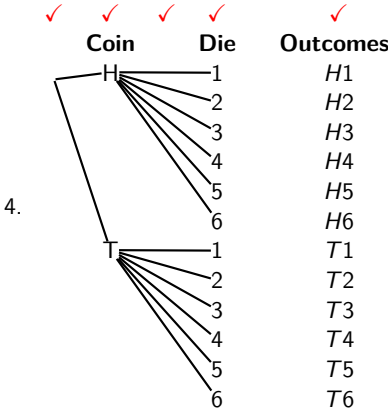
$2 \times 4 = 8$ possible outcomes

3.



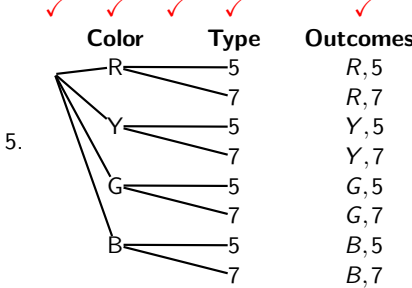
8 possible outcomes

$2 \times 2 \times 2 = 8$ possible outcomes



12 possible outcomes

$2 \times 6 = 12$ possible outcomes



8 possible outcomes

$4 \times 2 = 8$ possible outcomes

B.

1. $4 \times 2 \times 8 = 64$ possible combinations

2. $5 \times 4 \times 3 \times 2 \times 1 = 120$ ways

3. $4 \times 3 \times 2 = 24$ outfits

4. $2 \times 4 \times 7 = 56$ salads

5. a. $26 \times 26 \times 10 \times 10 \times 10 \times 10 = 6,760,000$ license plates

b. $26 \times 25 \times 10 \times 9 \times 8 \times 7 = 3,276,000$ license plates

6. $9 \times 10 \times 10 \times 10 \times 10 = 90,000$ numbers

7. $4 \times 4 \times 3 \times 2 \times 1 = 96$ numbers

8. $6 \times 5 \times 4 \times 3 \times 2 \times 1 = 720$ ways