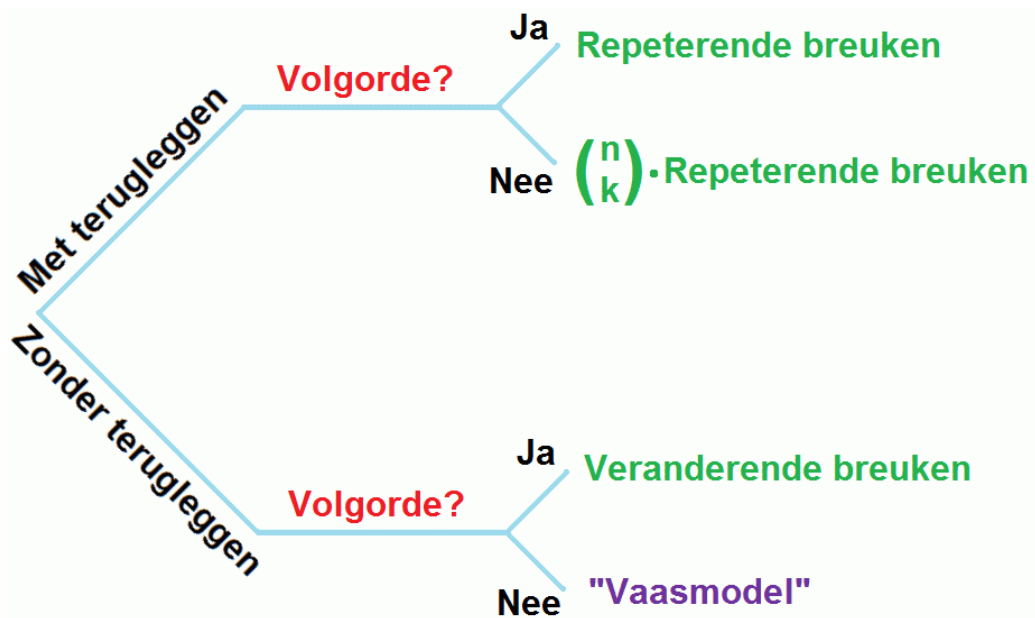
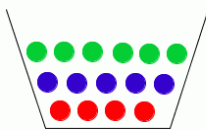




Voorbeeld 1

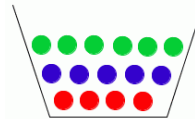


6 groene
5 blauwe
4 rode

6 pakken
Met terugleggen

$$P(RRGGGG) = \left(\frac{4}{15}\right)^2 \cdot \left(\frac{6}{15}\right)^4$$

Voorbeeld 2

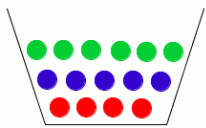


6 groene
5 blauwe
4 rode

6 pakken
Met terugleggen

$$P(2 \text{ rode en } 4 \text{ groene}) = \binom{6}{2} \cdot \left(\frac{4}{15}\right)^2 \cdot \left(\frac{6}{15}\right)^4$$

Voorbeeld 3

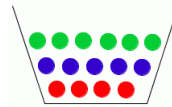


6 groene
5 blauwe
4 rode

6 pakken
Zonder terugleggen

$$P(RRGGGG) = \frac{4}{15} \cdot \frac{3}{14} \cdot \frac{6}{13} \cdot \frac{5}{12} \cdot \frac{4}{11} \cdot \frac{3}{10}$$

Voorbeeld 4



6 groene
5 blauwe
4 rode

6 pakken
Zonder terugleggen

$$P(2 \text{ rode en } 4 \text{ groene}) = \binom{6}{2} \cdot \frac{4}{15} \cdot \frac{3}{14} \cdot \frac{6}{13} \cdot \frac{5}{12} \cdot \frac{4}{11} \cdot \frac{3}{10}$$

or

$$\frac{\binom{4}{2} \binom{6}{4} \binom{5}{0}}{\binom{15}{6}} \quad (\text{Vaasmodel})$$

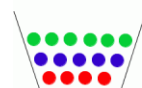
Op hoeveel manieren kun je het 'woord' **KAASSCHAAF** rangschikken?

K: 1
A: 4
S: 2
C: 1
H: 1
F: 1
10⁺

Dus op $\binom{10}{1} \binom{9}{4} \binom{5}{2} \binom{3}{1} \binom{2}{1} \binom{1}{1}$ manieren

Of op $\frac{10!}{1! \cdot 4! \cdot 2! \cdot 1! \cdot 1! \cdot 1!}$ manieren

Voorbeeld 5



6 groene
5 blauwe
4 rode

6 pakken
Met terugleggen

$$P(1 \text{ rode, } 2 \text{ blauwe en } 3 \text{ groene}) = \binom{6}{1} \binom{5}{2} \binom{3}{3} \cdot \left(\frac{4}{15}\right)^1 \cdot \left(\frac{5}{15}\right)^2 \cdot \left(\frac{6}{15}\right)^4$$