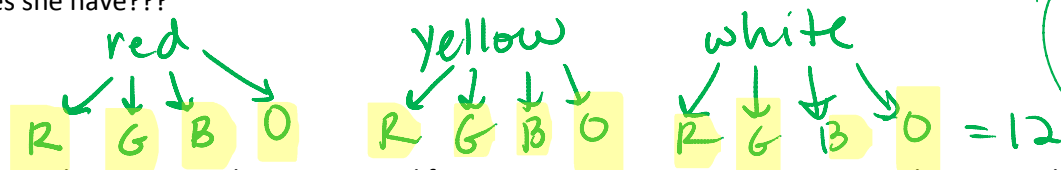


Key

Alg 2 Trig – 12.1 Day 1 INTRO

Carey has 3 skirts (red,yellow,white) and 4 tops (red,green,blue,orange) to choose from. How many possible outfits does she have???



$$\frac{3}{\text{skirts}} \cdot \frac{4}{\text{tops}} = 12$$

You need to create a 5 letter password for your computer account. How many choices are there?

Independent

$$26 \cdot 26 \cdot 26 \cdot 26 \cdot 26 = 11,881,376$$

You need to create a 5 letter password for your computer account but you cannot repeat any letters. How many choices are there?

Dependent

$$26 \cdot 25 \cdot 24 \cdot 23 \cdot 22 = 7,893,600$$

How many 6 character passwords can be formed if the first and last characters are non-repeating letters and the remaining characters are non-repeating digits?

0, 1, 2, 3, 4, 5, 6, 7, 8, 9 = 10 digits

$$\frac{26}{\text{letter}} \cdot \frac{10}{\text{digit}} \cdot \frac{9}{\text{diff. digit}} \cdot \frac{8}{\text{diff. digit}} \cdot \frac{7}{\text{diff. digit}} \cdot \frac{25}{\text{different letter}} = 3,276,000$$

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