

11-15-13

From this class, we are going to pick a President and a V.P. How many different ways are possible?

$$\frac{21}{P} \frac{20}{V.P} = 420$$

I have 11 players on my soccer team. How many different ways can I put them out on the field?

$$\frac{11}{G} \frac{10}{\text{Stupper}} \frac{9}{\text{sw.}}$$

$$11! = 39916800$$

Joe complained someone broke into his locker. If there are 50 numbers. How many different combos are there?

$$\frac{50}{1^{\text{st}}} \frac{49}{2^{\text{nd}}} \frac{49}{3^{\text{rd}}} = 120,050$$

My iPhone has a 4 digit passcode. How many different possibilities are there?

$$\frac{10}{0-9} \frac{10}{2^{\text{nd}}} \frac{10}{3^{\text{rd}}} \frac{10}{4^{\text{th}}} = 10^4 = 10,000$$

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11-15-13  
4<sup>th</sup> Trig

From all of you, I want to  
pick a President and a V.P.  
How many options do I have?

$$14 \cdot 13$$
$$\frac{14}{\text{Pres}} \cdot \frac{13}{\text{V.P.}} = 182$$

$$\frac{100}{P} \frac{99}{VP} \frac{98}{\text{Sec.}} \frac{97}{\text{Tr.}}$$
$$= 94,109,400$$

John complains someone  
is breaking into his locker.  
What are the odds someone  
guessed at his combo and  
got it correct?

$$\frac{50}{1^{\text{st}} \#} \cdot \frac{49}{2^{\text{nd}}} \cdot \frac{49}{3^{\text{rd}}} = 120,050$$

How many possibilities  
exist for Holt's cell  
phone log in?

$$\frac{10}{1^{\text{st}}} \frac{10}{2^{\text{nd}}} \frac{10}{3^{\text{rd}}} \frac{10}{4^{\text{th}}} = 10^4$$

10,000

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