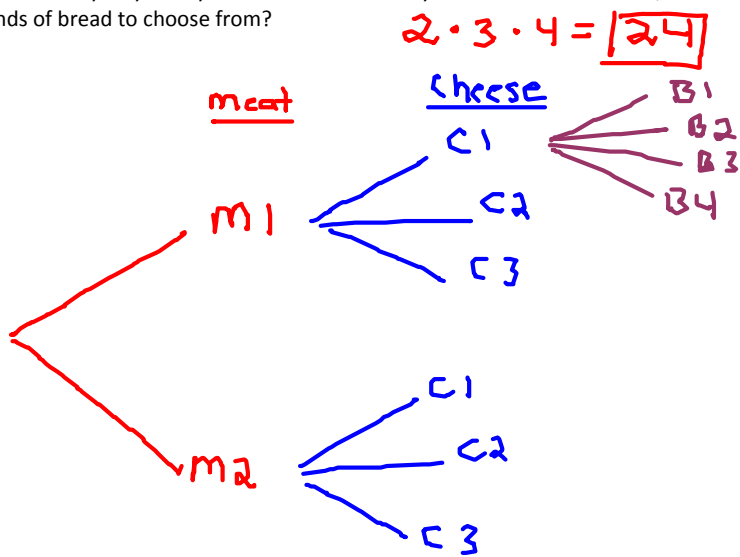
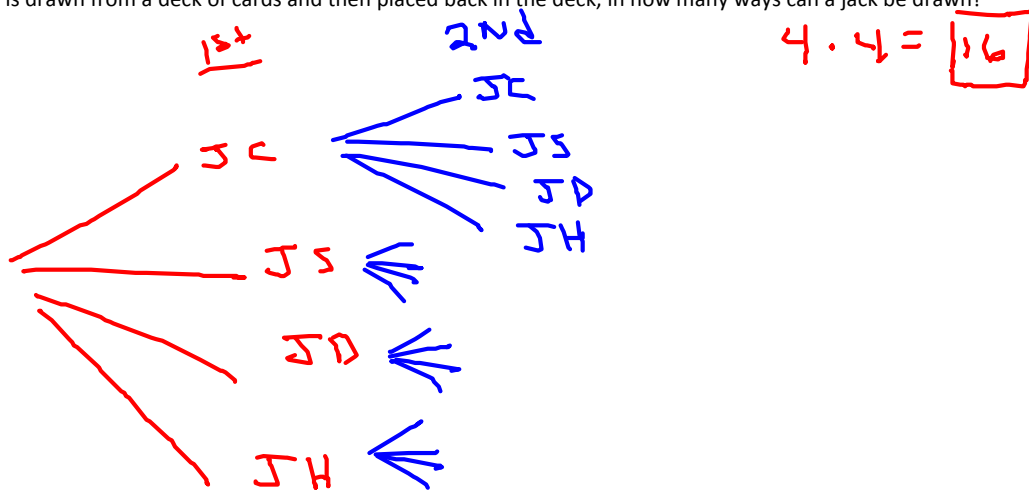


The Counting Principle

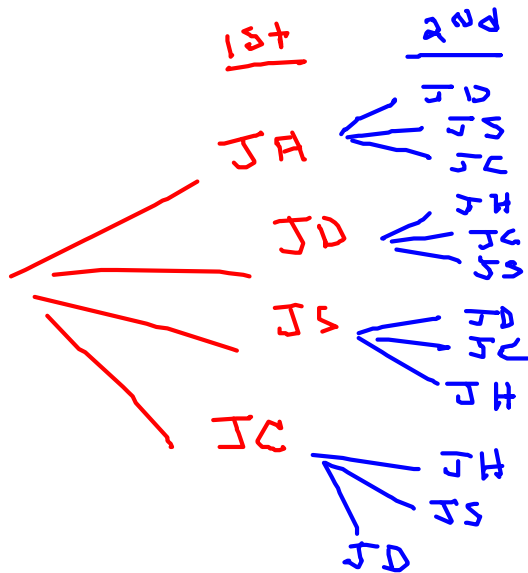
1. In how many ways can you make a sandwich if you have 2 kinds of meat, 3 kinds of cheese and 4 kinds of bread to choose from?



2. If a card is drawn from a deck of cards and then placed back in the deck, in how many ways can a jack be drawn?

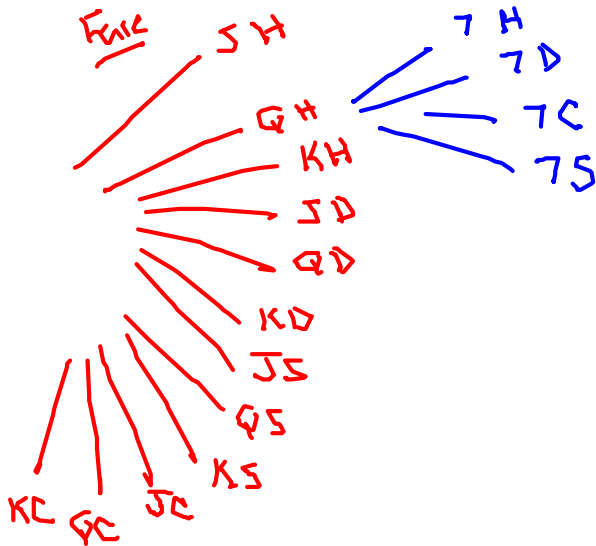


3. If a card is drawn from a deck of cards without replacement, in how many ways can a jack be drawn?



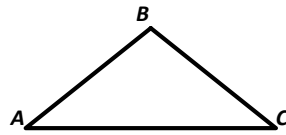
$$4 \cdot 3 = \boxed{12}$$

4. How many ways are there to draw a face card and then a seven?

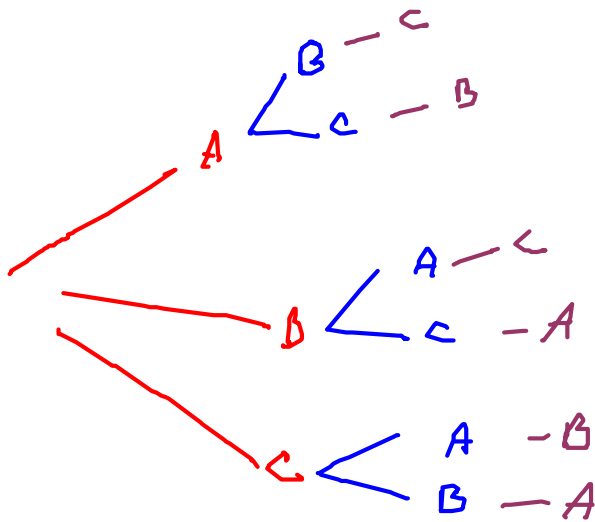


$$12 \cdot 4 = \boxed{48}$$

5. How many ways are there to name the triangle at the right?



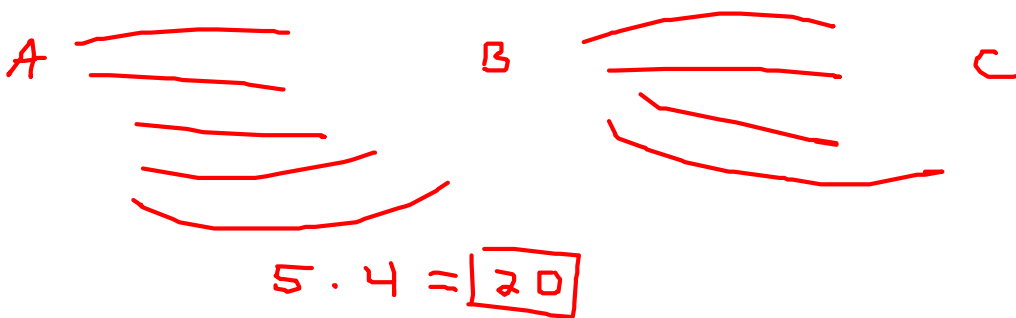
$$3 \cdot 2 \cdot 1 = \boxed{6}$$



ABC
 ACB
 BAC
 BCA
 CAB
 CBA

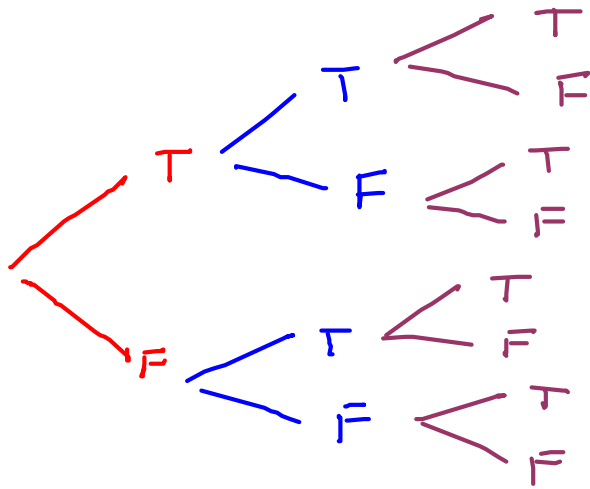
6. There are five different roads from Town A to Town B and four different roads from Town B to Town C. How many ways are there from Town A to Town C passing through Town B?

$$5 \cdot 4 = 20$$



$$5 \cdot 4 = \boxed{20}$$

7. A True/False quiz consists of three questions. How many different answer choices are possible?



TTT
TTF
TFT
TFF
FTT
FTF
FFT
FFF

$$2 \cdot 2 \cdot 2 = \boxed{8}$$