Math 3201 2.6B Solving Combination Equations for n

These are done similar to solving permutation equations for n. $\binom{n}{r} = n\binom{r}{r} = \binom{r}{r}$

Example 1:

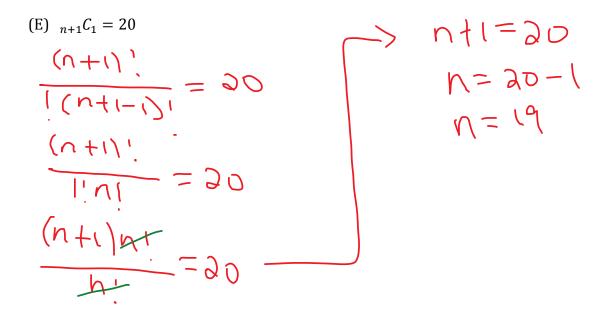
Solve for *n* and state restrictions.

(A)
$$_{n}C_{2} = 6$$

 $n!$
 $a!$ $(n-2)!$
 $a!$ $(n-2)!$
 $a!$ $(n-4)!$
 $a!$ $(n-2)!$
 $a!$ $(n-2)!$
 $n' = 15 \cdot 2!$
 $n' = 5 \cdot 2!$
 $n' = 5$

(D)
$$Z_n C_2 = 30$$

 $A = 15$
See (B) for entire solution.



Textbook Questions: page 119; #15a