

Dividing Factorials In The Form: $\frac{n! + (n-2)!}{(n-1)!}$

A. This reduces to the following:

$$\frac{n(n-1) + 1}{n-1}$$

B. Examples:

Ex [1] $\frac{8! + 6!}{7!} = \underline{\hspace{2cm}}$

- a. The numerator of the answer is $8(7) + 1 = 57$.
- b. The denominator of the answer is simply 7.
- c. The answer is $^{57}/_7$.

Ex [2] $\frac{12! + 10!}{11!} = \underline{\hspace{2cm}}$

- a. The numerator is $12(11) + 1 = 133$.
- b. The denominator is 11.
- c. The answer is $^{133}/_{11}$.