

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] $\frac{7! - 5!}{6!} = \underline{\hspace{2cm}}$

- The numerator of the answer is $7(6) - 1 = 41$.
- The denominator of the answer is simply 6.
- The answer is $^{41}/_6$.

Ex [2] $\frac{10! - 8!}{9!} = \underline{\hspace{2cm}}$

- The numerator is $10(9) - 1 = 89$.
- The denominator is 9.
- The answer is $^{89}/_9$.