

Subtracting Three Fractions In The Form: $\frac{1}{a} - \frac{1}{ab} - \frac{1}{ab^2}$

A. From algebra we learn:

$$\frac{1}{a} - \frac{1}{ab} - \frac{1}{ab^2} = \frac{b \cdot (b-1) - 1}{ab^2}$$

B. Use the following rules:

1. Multiply the coefficient 'b', by that number minus 1.
2. Subtract 1 to step 1. This is the numerator.
3. The last denominator of the question is the denominator of the answer.
4. Simplify the fraction if need be.

Ex [1] $\frac{1}{5} - \frac{1}{15} - \frac{1}{45} =$ _____ (fraction).

- a) The coefficient in this case is 3.
- b) $3 \times (3 - 1) = 6$.
- c) $6 - 1 = 5$. This is the numerator.
- d) The answer is $\frac{5}{45}$ which reduces to $\frac{1}{9}$.

Ex [2] $\frac{1}{2} - \frac{1}{10} - \frac{1}{50} =$ _____ (fraction).

- a) The coefficient in this case is 5.
- b) $5 \times (5 - 1) = 20$.
- c) $20 - 1 = 19$. This is the numerator.
- d) The answer is $\frac{19}{50}$.