

**Adding 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 plus 1.
2. Add 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]  $\frac{1}{4} + \frac{1}{12} + \frac{1}{36} =$  \_\_\_\_\_ (fraction).

- a) The coefficient in this case is 3.
- b)  $3 \times (3 + 1) = 12$ .
- c)  $12 + 1 = 13$ . This is the numerator.
- d) The answer is  $\frac{13}{36}$ .

Ex [2]  $\frac{1}{5} + \frac{1}{20} + \frac{1}{80} =$  \_\_\_\_\_ (fraction).

- a) The coefficient in this case is 4.
- b)  $4 \times (4 + 1) = 20$ .
- c)  $20 + 1 = 21$ . This is the numerator.
- d) The answer is  $\frac{21}{80}$ .