Multiplying And Adding Numbers In The Form: ab + bc

A. From algebra we can factor:

$$ab + bc = b(a + c)$$

B. Using numbers instead of variables we get the following:

1. Take out the number that both sides have in common.

2. Add the remaining numbers.

3. Multiply the number in step 1 with the result in step 2 for the answer.

   Ex [1] 15 x 12 + 15 x 8 =_____.

   a) Rewrite in the form 15 x (12 + 8).

   b) 15 x 20 = 300.

   c) The answer is 300.

   Ex [2] 16 x 16 + 16 x 17 =_____.

   a) Rewrite in the form 16 x (16 + 17).

   b) 16 x 33 = 48 x 11. See *Double and Half*.

   c) 48 x 11 = 528. See *Multiplying by 11*.

C. Ex [2] uses a variety of different methods. This is just how I would do the problem, but there are many different ways of going about solving this problem.   This is up to you.