**How to Convert a Decimal Number to Hexadecimal Using the Subtraction-Based Method:**

1. **Lay out empty slots** for possible hexadecimal digits based on the range of your number. Each slot represents a power of 16, starting from the largest on the left to the smallest on the right.

For a number potentially up to 162162:  
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256 16 1

1. **Starting from the leftmost slot (highest value) and working right**:
   * Compare the current decimal number to the value represented by the empty slot.
   * If the slot value is less than or equal to the decimal number:
     + Determine how many times the slot value can be subtracted from the current number without going negative.
     + Place the corresponding hexadecimal value in that slot (numbers 1-9 for values 1-9, A for 10, B for 11, and so on).
     + Subtract the total value from the decimal number.
   * If the slot value is greater than the decimal number, place a '0' in that slot.
   * Continue to the next slot using the remainder from the subtraction.
2. **Repeat this process** until you've filled all slots or the remainder becomes 0.
3. The resulting hexadecimal number is read from the leftmost to the rightmost filled slot.

**Convert 300 to Hexadecimal Using the Subtraction-Based Method:**

1. **Lay out empty slots for the number 300**:

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256 16 1

1. **Begin the conversion**:
   * Is 300 ≥ 256? Yes. Determine how many 256s are in 300. Since 1×256=2561×256=256 and 256≤300256≤300, place a 1 and subtract 256 from 300. Remaining: 44  
     1 \_ \_
   * Is 44 ≥ 16? Yes. Determine how many 16s are in 44. Since 2×16=322×16=32 and 32≤4432≤44, place a 2 and subtract 32 from 44. Remaining: 12  
     1 2 \_
   * For 12, it directly translates to 'C' in hexadecimal, so place a C in the final slot.  
     1 2 C

The hexadecimal representation for 300 using this method is: 12C.

**Convert 45 to Hexadecimal Using the Subtraction-Based Method:**

1. **Lay out empty slots for the number 45**:

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256 16 1

1. **Begin the conversion**:
   * Is 45 ≥ 256? No. Place a 0 in the 256's place.   
     0 \_ \_
   * Is 45 ≥ 16? Yes. Determine how many 16s are in 45. Since 2×16=322×16=32 and 32≤4532≤45, place a 2 and subtract 32 from 45. Remaining: 13  
     0 2 \_
   * For 13, it directly translates to 'D' in hexadecimal. Place a D in the 1's place.   
     0 2 D

The hexadecimal representation for 45 using this method is: 02D. However, it's common practice to drop leading zeros in hexadecimal representation, so we can represent 45 as 2D.