

Number Properties (5)

1.- If the remainder is 1 when m is divided by 2 and the remainder is 3 when n is divided by 4, which of the following must be true?

- (A) m is even
- (B) n is even
- (C) $m + n$ is even
- (D) mn is even
- (E) m/n is even

2.- If m is a positive integer and 75^3 is a multiple of 5^m , what is the largest possible values for m ?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

3.- What is the average (arithmetic mean) of all multiples of 10 from 10 to 400 inclusive?

- (A) 190
- (B) 195
- (C) 200
- (D) 205
- (E) 210

4.- The greatest common factor of positive integers m and n is 12. What is the greatest common factor of $(2m^2, 2n^2)$?

- A. 2
- B. 12
- C. 24
- D. 144
- E. 288

Resp: 1/c, 2/d, 3/d, 4/e