1. What is the sum of the digits of the positive integer n where n < 99?
   (1) n is divisible by the square of the prime number y.
   (2) y^4 is a two-digit odd integer.

A. Statement 1 ALONE is sufficient to answer the question, but statement 2 alone is NOT sufficient.
B. Statement 2 ALONE is sufficient to answer the question, but statement 1 alone is NOT sufficient.
C. BOTH statements 1 and 2 TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient
D. Each statement ALONE is sufficient to answer the question.
E. Statement 1 and 2 TOGETHER are NOT sufficient to answer the question.

The correct answer is C.

1. 2. If x is a positive integer, is x! + (x + 1) a prime number?
   (1) x < 10 (2) x is even

A. Statement 1 ALONE is sufficient to answer the question, but statement 2 alone is NOT sufficient.
B. Statement 2 ALONE is sufficient to answer the question, but statement 1 alone is NOT sufficient.
C. BOTH statements 1 and 2 TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient
D. Each statement ALONE is sufficient to answer the question.
E. Statement 1 and 2 TOGETHER are NOT sufficient to answer the question.

The correct answer is E.

3. Is √(x + y) an integer?
   (1) x3 = 64 (2) x2 = y – 3

2. Statement 1 ALONE is sufficient to answer the question, but statement 2 alone is NOT sufficient.
3. Statement 2 ALONE is sufficient to answer the question, but statement 1 alone is NOT

sufficient.

4. BOTH statements 1 and 2 TOGETHER are sufficient to answer the question, but NEITHER statement ALONE is sufficient
5. Each statement ALONE is sufficient to answer the question.
6. Statement 1 and 2 TOGETHER are NOT sufficient to answer the question.

The correct answer is C.

4. How many prime numbers between 1 and 100 are factors of 7,150?

A. One

B. Two

C. Three

D. Four

E. Five

Answer: D.