1. How many positive factors of 36 are also multiples of 4?

(A) 2   (B) 3   (C) 4   (D) 5   (E) 6

1996 Q1

2003 Q2

2. Which of the following numbers has the smallest prime factor?

(A) 55   (B) 57   (C) 58   (D) 59   (E) 61

2007 Q3

3. What is the sum of the two smallest prime factors of 250?

(A) 2   (B) 5   (C) 7   (D) 10   (E) 12

1993 Q3

3. Which of the following numbers has the largest prime factor?

(A) 39   (B) 51   (C) 77   (D) 91   (E) 121

2000 Q3

3. How many whole numbers lie in the interval between $\frac{5}{3}$ and 2π ?

(A) 2   (B) 3   (C) 4   (D) 5   (E) infinitely many

1996 Q3

3. The 64 whole numbers from 1 through 64 are written, one per square, on a checkerboard (an 8 by 8 array of 64 squares). The first 8 numbers are written in order across the first row, the next 8 across the second row, and so on. After all 64 numbers are written, the sum of the numbers in the four corners will be

(A) 130   (B) 131   (C) 132   (D) 133   (E) 134

1990 Q4

4. Which of the following could **not** be the unit's digit [one's digit] of the square of a whole number?

A) 1   B) 4   C) 5   D) 6   E) 8
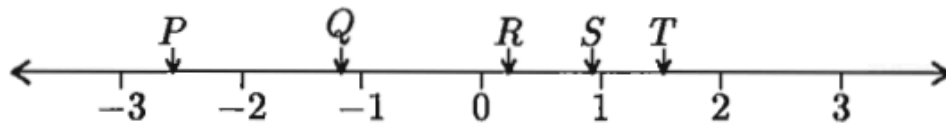
2

2014 Q4

4. The sum of two prime numbers is 85. What is the product of these two prime numbers?

(A) 85   (B) 91   (C) 115   (D) 133   (E) 166

1996 Q5

5. The letters P, Q, R, S, and T represent numbers located on the number line as shown.

Which of the following expressions represents a negative number?

(A) $P - Q$ (B) $P \cdot Q$ (C) $\dfrac{S}{Q} \cdot P$ (D) $\dfrac{R}{P \cdot Q}$ (E) $\dfrac{S + T}{R}$

1997 Q5

5. There are many two-digit multiples of 7, but only two of the multiples have a digit sum of 10. The sum of these two multiples of 7 is

(A)   119   (B)   126   (C)   140   (D)   175   (E)   189

2016 Q5

5. The number N is a two-digit number.

- When N is divided by 9, the remainder is 1.
- When N is divided by 10, the remainder is 3.

What is the remainder when N is divided by 11?

(A) 0   (B) 2   (C) 4   (D) 5   (E) 7