

Directions: Select one or more answer choices according to the specific question directions. If the question does not specify how many answer choices to select, select all that apply. - The correct answer may be just one of the choices or as many as all of the choices, depending on the question. - No credit is given unless you select all of the correct choices and no others. If the question specifies how many answer choices to select, select exactly that number of choices.

In a triangle JKL, the length of two sides is given as 8 and 13 and the length of third side is unknown. Which of the following could be the length of this unknown side? Indicate all possible options.

- 2
- 4
- 6
- 9
- 15
- 22

If 'P' is a negative odd number and 'Q' is a Prime number other than 2, then which of the following options is INCORRECT. Indicate all possible answers.

- PQ is negative odd integer
- PQ is negative prime number.
- PQ square root is real.
- PQ is negative even number.

For all values of x and y if  $x < y < (x+y)$  which of the following must be negative. Indicate all possible options:

- 2x
- y
- x-y
- 2x-y
- 3x

If 3 and 14 are factors of a number, which of the following can possibly be true? Indicate all possible answers.

- Number is divisible by 6
- Number is always divisible by 2
- Number is divisible by 22

- Number is divisible by 3 & 14 only
- Number is always a factor of 5

If  $6!/3^m$  is an integer, which of the following options are greater than the largest possible value of  $m$ ? Indicate all possible values.

- 1
- 2
- 3
- 4
- 5

Let 'x' be the 2-digit numbers which can be created from 5 distinct numbers. Which of the following options is less than 'x'? Indicate all possible options.

- 10
- 15
- 20
- 40
- 60

Henderson is the elder brother of Mark, and their age difference is 3 years. Mark is 9 years younger than Alisa. If Alisa is at least 33 years old, which of the following could be the age of Henderson?

- 21
- 24
- 26
- 27
- 29
- 35

There are 'x' number of sweets wrapped in a gift paper. Alison gives  $\frac{4}{7}$  of the total sweets to his friend Elena, and gives  $\frac{3}{5}$  of the remaining sweets to his friend Michael. Which of the following could be the original number of sweets which were wrapped in the gift paper? Indicate all possible options.

- 15
- 25
- 35
- 56
- 70
- 95

Literary club in a particular university consists of at least 150 members. The number of faculty members in this group is 60% the number of male students, which is 50% the number of female students in this club. Which of the following could be the number of faculty members in this literary club? Indicate all possible options.

- 19
- 21
- 23
- 26
- 27
- 29

If  $-13 < a < -2$  and  $1 < b < 9$ . Which of the following could be equal to the product of 'a' and 'b'. Indicate all possible values.

- 20
- 18
- 15
- 14
- 13
- 9