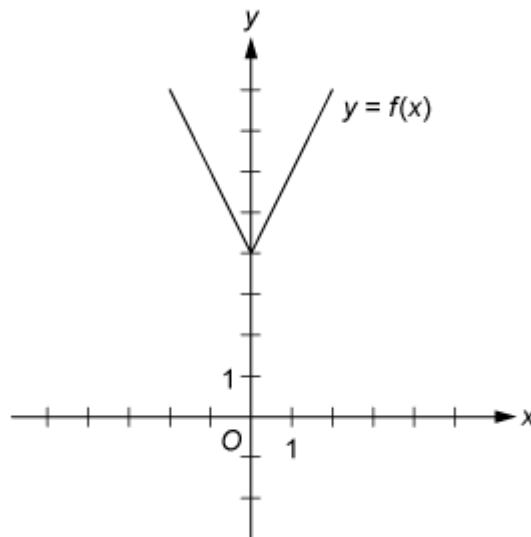


(Sample Questions)

Q.1. A certain jar contains 60 jelly beans — 22 white, 18 green, 11 yellow, 5 red and 4 purple. If a jelly bean is to be chosen at random, what is the probability that the jelly bean will be neither red nor purple?

- (A) 0.09
- (B) 0.15
- (C) 0.54
- (D) 0.85
- (E) 0.91

Q.2. The figure below shows the graph of the function f , defined by $f(x) = |2x| + 4$ for all numbers x . For which of the following functions g , defined for all numbers x , does the graph of g intersect the graph of $f(x)$?



- (A) $g(x) = x - 2$
- (B) $g(x) = x + 3$
- (C) $g(x) = 2x - 2$
- (D) $g(x) = 2x + 3$
- (E) $g(x) = 3x - 2$

Q.3. What is the perimeter of a rectangle that is twice as long as it is wide and has the same area as a circle of diameter 8?

- (A) $8\sqrt{\pi}$
- (B) $8\sqrt{2\pi}$
- (C) 8π
- (D) $12\sqrt{2\pi}$
- (E) 12π

Q.4. If the arithmetic mean of x and y is m , and $z = 2m$, then the arithmetic mean of x , y and z is:

- (A) m
- (B) $2m/3$
- (C) $4m/3$
- (D) $3m/4$
- (E) $3/4m$

Q.5. If $N = 3^P$ and $M = P - 1$, then in terms of M , $3/N =$ _____

- (A) 3^M
- (B) M^9
- (C) $1/3^M$
- (D) $1/M^3$
- (E) $3M^3$

A University campus consists of six buildings – B, G, L, R, X and Z – connected by five paths – I, II, III, IV and V – that follows these routes:

Path I connects G and R only

Path II connects X and Z only

Path III connects B and X only

Path IV connects G and Z only

Path V connects L and Z only

Daily tours of the campus are conducted by guides who are careful to travel only on the five paths listed above. The five paths are each 100 yards in length.

Q.6. Which building must be visited at least twice on a campus tour that visits every building?

- (A) B
- (B) G
- (C) L
- (D) R
- (E) Z

Q.7. If a tour starts at G and travels first on path IV, how long, in yards, is the shortest possible route that visits every building on the campus?

- (A) 700
- (B) 800
- (C) 900
- (D) 1,000
- (E) 1,100

Q.8. If a tour is to visit every building by the shortest possible route, starting from which building will the tour be longest?

- (A) B
- (B) G
- (C) L
- (D) X
- (E) Z

Q.9. Do whatever you like, I am not at all _____.

(Complete the sentence using proper form/word)

- (A) Concern
- (B) Attend
- (C) Attended
- (D) Concern
- (E) Concerned

Q.10. Book is to author as poem is to _____

- (A) Poet
- (B) Poetry
- (C) Verse
- (D) Singer
- (E) Artist

Q.11. Choose the word you consider nearest in meaning to “Parity”.

- (A) Similarity
- (B) Duplicate
- (C) Miniature
- (D) Golf-tee
- (E) Event