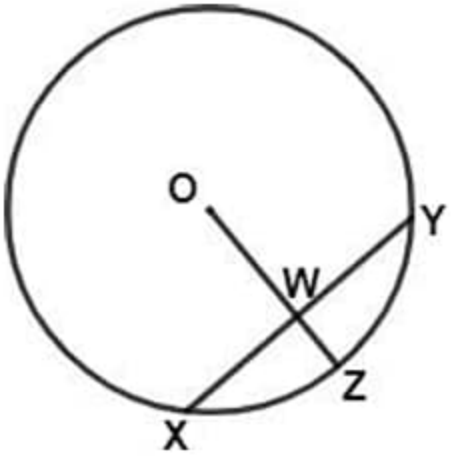
Question 1:



What is the area of the circle shown above with center O?

I. W is the mid-point of chord XY.

II. The ratio of ZW to OW is 3:5

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

▶ View Solution

Question 2:

If $A^4 + B^4 = 100$, then the greatest possible value of "A" lies between

(A) 0 and 3

(B) 3 and 6

(C) 6 and 9

(D) 9 and 12

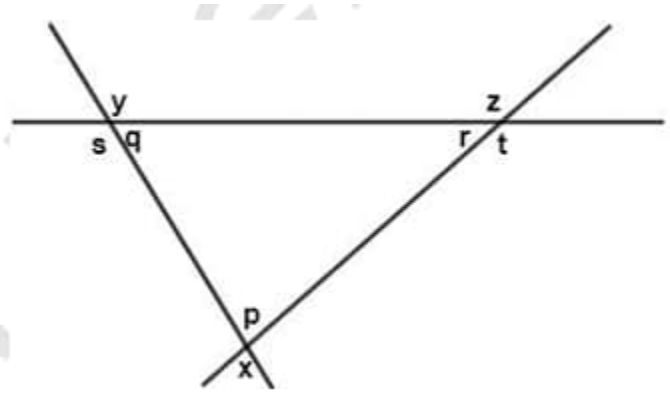
(E) 12 and 15

Correct Answer:

(B) 3 and 6

▶ View Solution

Question 3:



In the above figure, ifA. 120y + z = 280°, what is the degree measure of angle x?

(A) 100

(B) 90

(C) 80

(D) 60

Correct Answer:

(B) 100

▶ View Solution

Question 4:

In a circus company the price of tickets for adult and children were
(50 and
)30 respectively. The company has sold a total of 1000 tickets. The average (arithmetic mean) price per ticket sold was
(42. How many tickets were sold for children?

(A) 200

(B) 300

(C) 400

(D) 600

(E) 800

Correct Answer:

(C) 400

▶ View Solution

Question 5:

There are two vessels. In the first vessels, the ratio of milk to water is 1:2 and in the second vessel the milk and water are in the ratio 2:3. In what ratio the contents in two vessels must be mixed such that the resulting mixture will have milk and water in the ratio 5:8?

(A) 1:3

(B) 3:10

(C) 3:5

(D) 10:3

(E) Cannot be determined

Correct Answer:

(B) 3:10

▶ View Solution

Question 6:

A chemical factory produces two kinds of unnatural amino acids: acid A and acid B. Of the acids produced by the factory last year, 1/3 were acid A and the rest were acid B. If it takes 2/5 as many hours to produce acid B per unit as it does to produce acid A per unit, then the number of hours it took to produce the acid B last year was what fraction of the total number of hours it took to produce all the acids?

(A) 2/5

(B) 4/9

(C) 17/35

(D) 1/2

(E) 5/9

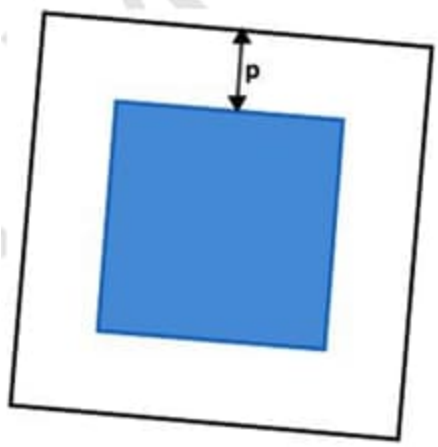
Correct Answer:

(B) 4/9

▶ View Solution

Question 7:

The figure above represents a picture set in a square wooden frame that is "p" inches wide on all sides. If the combined area of picture and the frame is equal to "q" square inches, then in terms of p and q, what is the perimeter of the picture?



(A) -8 +4

(B) -2 +4

(C) +8 -4

(D) +5 -4

(E) $4\sqrt{q}$ - 8p

Correct Answer:

(E) $4\sqrt{q}$ - 8p

▶ View Solution

Question 8:

Is parallelogram PQRS a rhombus?

I. PQ=QR=RS=SP

II. The line segments SQ and RP are perpendicular bisectors of each other.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(D) Each statement alone is sufficient to answer the question.

▶ View Solution

Question 9:

If $y - x > x + y$, where "x" and "y" are integers, which of the following must be true?

I. (OCR error, likely x < 0)

II. xy < 0

III. y < 0

(A) I only

(B) II only

(C) I and II only

(D) I and III only

(E) II and III only.

Correct Answer:

(A) I only

▶ View Solution

Question 10:

If $p < x < q$ and $r < y < s$, is $x > y$?

I. p = r

II. q < r

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

▶ View Solution

Question 11:

A book shop sold a set of harry potter book series to a book collector for 40 percent more than the store had originally paid for the books. When the collector tried to resell the books to the store, the store bought it back at 50 percent of what the book collector had paid. The shop then sold the book again at a profit of 70 percent on its buy-back price. If the difference between the series of book's original cost to the shop and the book's buy-back price was
(100, for approximately how much did the shop sell the books the second time?

(A) 600

(B) 567

(C) 396

(D) 333

(E) 330

Correct Answer:

(C) 396

▶ View Solution

Question 12:

By what percent was the price of a certain Tab discounted for a sale?

I. The price of the tab was sold with a discount of
(50.

II. The price of the tab before it was discounted for the sale was 25 percent greater than the discounted price.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

▶ View Solution

Question 13:

The colored roses in the bouquet of flowers are red, yellow and pink. The ratio of the number of red to the number of yellow to the number of Pink in the bouquet is 7:4:6, respectively. If there are more than 7 yellow-colored roses, what is the minimum number of total roses in the bouquet?

(A) 8

(B) 12

(C) 14

(D) 24

(E) 34

Correct Answer:

(E) 34

▶ View Solution

Question 14:

If Polygon A has fewer than 10 sides and the sum of the interior angles of polygon A is divisible by 16, how many sides does Polygon A have?

(A) 4

(B) 5

(C) 6

(D) 7

(E) 8

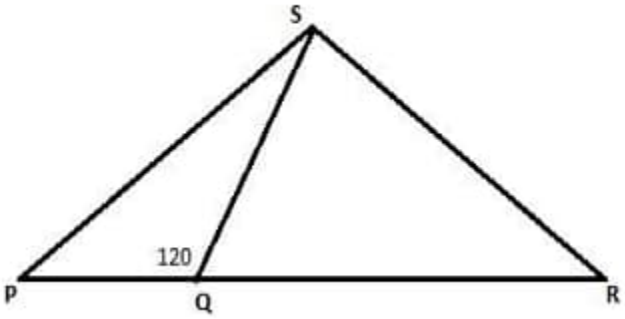
Correct Answer:

(C) 6

▶ View Solution

Question 15:

In the figure above PRS is a triangle, what is the measure of the angle PSQ?



I. QS=QR=1

II. PR=2

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

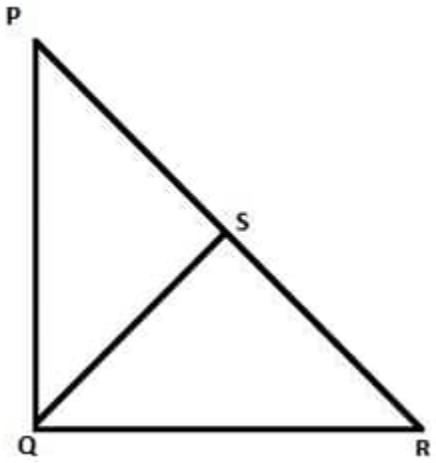
Correct Answer:

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

▶ View Solution

Question 16:

In the diagram above, triangle PQR has a right angle at Q. If PQ > QR, then what is the ratio of the area of triangle PQS to the area of triangle RQS?



I. Line segment QS is perpendicular to PR and has a length of 12.

II. PQR has a perimeter of 60.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

▶ View Solution

Question 17:

In a certain show, a lottery ticket is numbered consecutively from 100 through 999 (both inclusive). What is the probability that a randomly selected ticket will have a number with a ten's digit as "3"?

(A) 1/5

(B) 90/899

(C) 1/10

(D) 1/11

(E) 10/111

Correct Answer:

(C) 1/10

▶ View Solution

Question 18:

In a certain linguistics school, there are totally 250 students. Of those 250 students, 40 percent study French as a foreign language, 30 percent study German as a foreign language and 50 percent study Spanish as a foreign language. If 10 students study all these three foreign languages and 10 students didn't choose these three foreign languages, then how many students are studying in exactly two of these foreign languages?

(A) 20

(B) 30

(C) 40

(D) 50

(E) 60

Correct Answer:

(C) 40

▶ View Solution

Question 19:

The interior of a rectangular box is designed by a certain manufacturer to have a volume of "m" cubic feet and ratio of length to width to height of 5:3:2. In term of "m", which of the following equals the length of the box in feet?

(A) $\sqrt[3]{\frac{25m}{6}}$

Correct Answer:

(A)

▶ View Solution

Question 20:

Lines "l" and "k" are perpendicular to each other. And line "l" passes through points (4,1) and (8, -1). What is the equation of the line "k" which passes through the point (3,1)?

(A) 2y - x = 5

(B) 2x - y = 5

(C) y - 2x = 5

(D) y + 2x = 5

(E) 2y + x = 5

Correct Answer:

(B) 2x - y = 5

▶ View Solution

Question 21:

A certain cafeteria sells donuts and pizzas. Is the number of people who bought donuts are more than the number of people who bought pizzas?

I. Of the people who bought donuts, 30 percent of them also bought pizzas.

II. Of the people who bought pizzas, 40 percent of them also bought donuts.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

▶ View Solution

Question 22:

Alan purchased pens and pencils at a certain shop, where each pen costs 3 dollars and each pencil cost 2 dollars. What is the total number of pen and pencils Alan purchased?

I. Alan bought pen and pencils for the total cost of 10 dollars.

II. Total cost of the pens which Allan bought is less than 10 dollars.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

▶ View Solution

Question 23:

Water is pumped into the completely empty tank at a constant rate through an inlet pipe. At the same time, there is a leak at the bottom of the tank which leaks water at a constant rate. How long it will take the tank get filled completely?

I. Total capacity of water the tank can hold is 120 gallons.

II. Inlet pipe can completely fill the empty tank in 10 hours if there is no leak in the tank, and also the leak at the bottom of the tank can completely empty the filled tank in 15 hours if there is no water pumped into the tank.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

▶ View Solution

Question 24:

If 'x' is a number such that $x^2 - 5x + 4 < 0$ and $x^2 - 3x + 2 < 0$, which of the following can be the value of 'x'?

(A) 3.5

(B) 3.0

(C) 2.4

(D) 1.6

(E) 0.8

Correct Answer:

(D) 1.6

▶ View Solution

Question 25:

If p^2 is an integer and $\sqrt{p^6 - p^4 - q - 1} = 10$, what is the value of "$p^2$"?

I. $q = -1$

II. $p^2 + q = 4$

(A) Statement I alone is sufficient but statement II aloneq = q + 2 is not sufficient to answer the question.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(D) Each statement alone is sufficient to answer the question.

▶ View Solution

Question 26:

If "P" is a positive integer, is $P^4 + 7$ an odd number?

I. "P" is the smallest positive integer that is divisible by all the integers from 51 to 55, inclusive.

II. 13^P is an odd number.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

▶ View Solution

Question 27:

If 'm' is a positive integer, is "m^2 + 1" divisible by 10 (leaves remainder ZERO)?

I. When m is divided by 2, it leaves a remainder of 1.

II. When m is divided by 5, it leaves a remainder of 2.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(C) Both statements I and II together are sufficient to answer the question but neither statement is sufficient alone.

▶ View Solution

Question 28:

If "x" is a positive integer, is $x > 33$?

I. x is an odd number.

II. The sum of the digits of x is 5.

(A) Statement I alone is sufficient but statement II alone is not sufficient to answer the question asked.

(B) Statement II alone is sufficient but statement I alone is not sufficient to answer the question asked.

(C) Both statements I and II together are sufficient but neither statement is sufficient alone.

(D) Each statement alone is sufficient to answer the question.

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

Correct Answer:

(E) Statements I and II are not sufficient to answer the question asked and additional data is needed to answer the statements.

▶ View Solution

Question 29:

List A has seven integers; whose range is 80 and median is 240. The median for the three smallest integers in List A is 180. What is the possible range for the largest three integers in the List A?

Possible Values:

I. 75

II. 24

III. 0

(A) I only

(B) II only

(C) I and III only

(D) II and III only

(E) III only

Correct Answer:

(E) III only

▶ View Solution