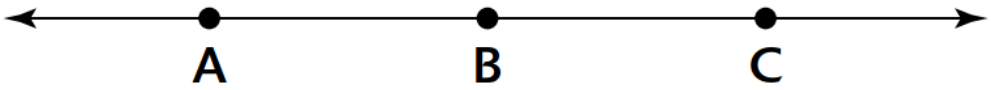
GMAT QUANT PRACTICE PAPER

DATA SUFFICIENCY

QUESTION 1

Given that 2x + y = 12, what is the value of y?
(1) y = –2x + 12
(2) x + y = 9

QUESTION 2



In the accompanying figure, points A, B, and C lie on a line. Is B the midpoint of AC?

(1) AC = 2AB
(2) $BC=\frac{1}{2}AC$

QUESTION 3

There are 20 people in a group, who are either first year student or second year student. Select 2 people randomly, is the possilibility that two selected people are all first year student greater than 1/2?

1:First year students are more than 10 people.
2:The possibility that two selected people are all second year student is less than 1/2

QUESTION 4

Four men and three women make up a seven-member committee. The committee has one male captain and one female captain. If all seven committee members are seated in a straight row of seven chairs, does at least one man sit next to another man?

(1) No woman sits next to another woman.

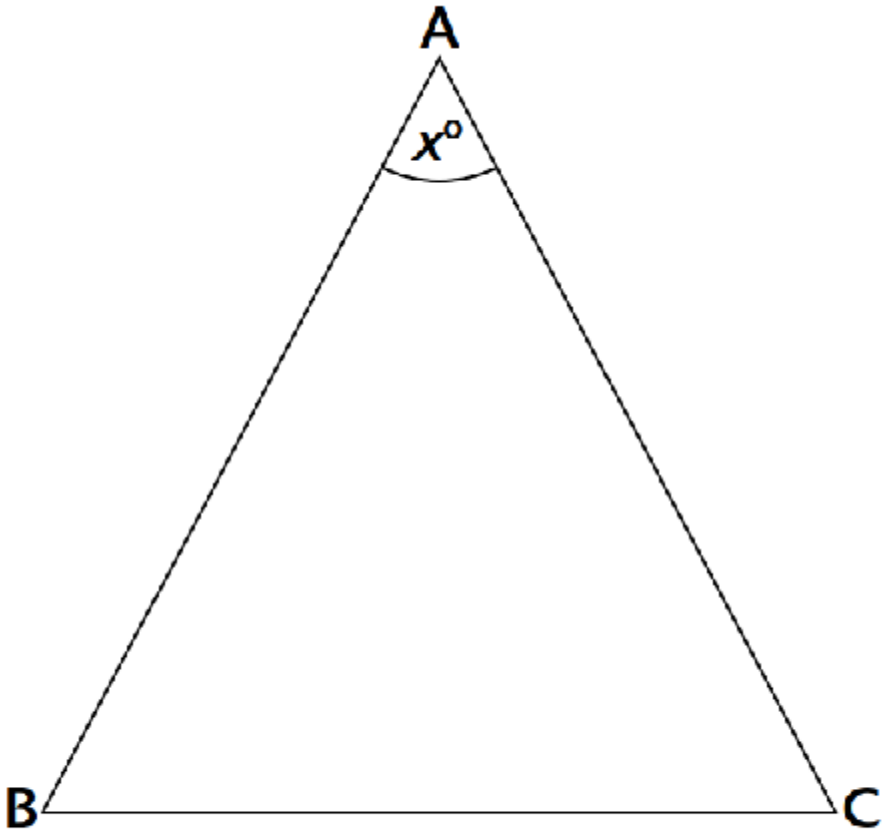
(2) The captains sit in the first and seventh chairs.

QUESTION 5

What is the value of the positive integer n?

(1) n is divisible by 5
(2) 10 < n < 30

QUESTION 6



Not drawn to scale

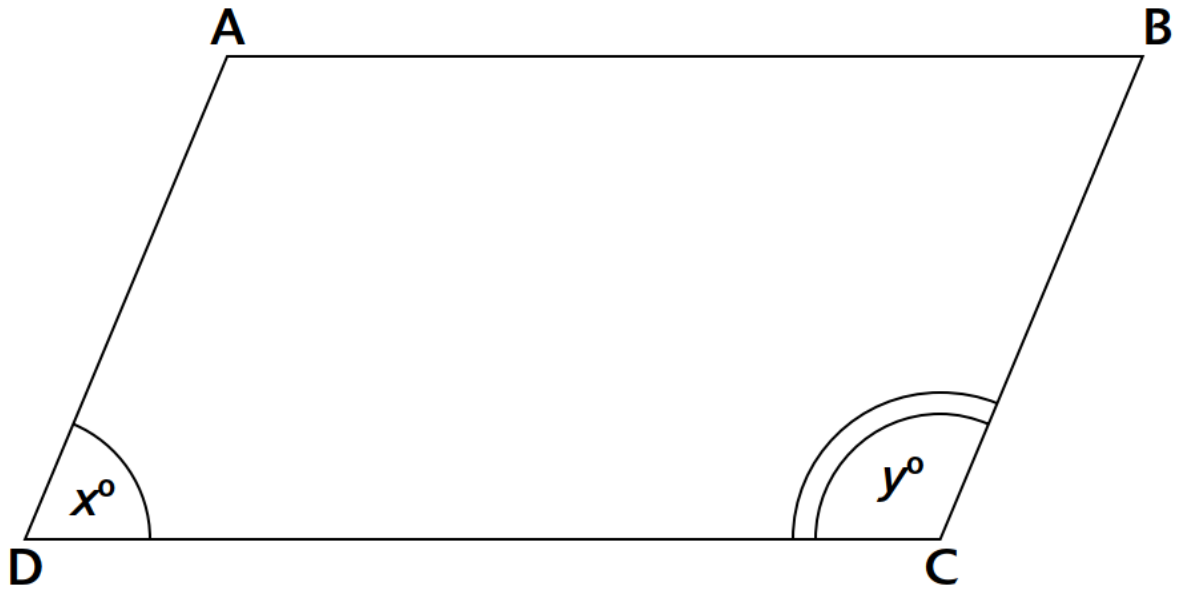
In the accompanying figure, is △△ ABC an isosceles triangle?

(1) m∠B = (2x – 10)°
(2) m∠C = (x + 30)°

QUESTION 7

Is n an odd integer?
(1) 2n is an even integer.
(2) 2n – 1 is an odd integer.

QUESTION 8



In the accompanying figure, ABCD is a parallelogram. What is the value of x?

(1) y = 2x
(2) y = 120

QUESTION 9

If a^2 is not equal to b^2 what is the value of $a-b a^2-b^2 a-b a^2-b^2$

1) a + b = 8
2) a - b = 6

QUESTION 10

Max has $125 consisting of bills each worth either $5 or $20. How many bills worth $5 does Max have?

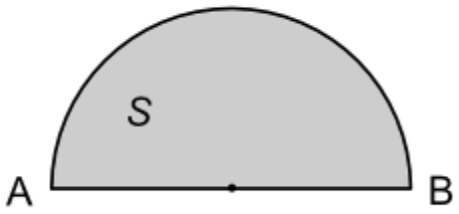
(1) Max has fewer than 5 bills worth $5 each.
(2) Max has more than 5 bills worth $20 each.

QUESTION 11

If a and b are nonzero integers, is a/b an integer?

(1) a is a factor of b.
(2) a is a multiple of b .

QUESTION 12



What is the radius of semicircle S, shown above?

(1) The perimeter of S is 100.

(2) The perimeter of S is (50π)% longer than line segment AB.

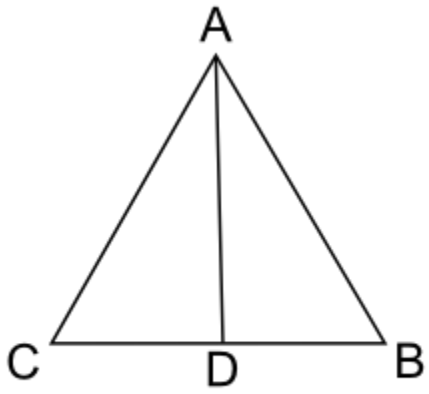
QUESTION 13

A craftsperson made 126 ornaments and put them all into boxes. If each box contained either 6 ornaments or 24 ornaments, how many of the boxes contained 24 ornaments?

(1) Fewer than 4 of the boxes contained 6 ornaments

(2) More than 3 of the boxes contained 24 ornaments

QUESTION 14



What is the perimeter of triangle ADC?

(1) AD is a median in ΔABC.

(2) The perimeter of ΔABC is 18.

QUESTION 15

A fair six-sided dice was rolled n times. What is the value of n?

(1) The number of different possible sequences of n-digit numbers when a dice is rolled n times is 7776.

(2) If the dice has been rolled 3 times fewer, the probability of getting a 6 on every roll would have been 1/36.

PROBLEM SOLVING

QUESTION 1

What is the greatest positive integer which will divide 3962, 4085 and 4167 leaving the same remainder in each case?

(A) 37
(B) 39
(C) 41
(D) 43
(E) 45

QUESTION 2

A driver completed the first 20 miles of a 40-mile trip at an average speed of 50 miles per hour. At what average speed must the driver complete the remaining 20 miles to achieve an average speed of 60 miles per hour for the entire 40-mile trip? (Assume that the driver did not make any stops during the 40-mile trip.)

(A) 65 mph
(B) 68 mph
(C) 70 mph
(D) 75 mph
(E) 80 mph

QUESTION 3

A driver completed the first 20 miles of a 40-mile trip at an average speed of 50 miles per hour. At what average speed must the driver complete the remaining 20 miles to achieve an average speed of 60 miles per hour for the entire 40-mile trip? (Assume that the driver did not make any stops during the 40-mile trip.)

(A) 65 mph
(B) 68 mph
(C) 70 mph
(D) 75 mph
(E) 80 mph

QUESTION 4

What is the greatest four-digit positive integer which when divided by 10, 15, 21 and 28 leaves 4, 9, 15 and 22 as remainders, respectively ?

(A) 9654
(B) 9664
(C) 9666
(D) 9672
(E) 9864

QUESTION 5

AA
+
BB
+
CC
___
ABC

In the correctly worked addition problem above, A, B, and C are distinct digits. What is the sum of A, B and C ?

A. 12
B. 15
C. 17
D. 18
E. 19

QUESTION 6

A merchant paid $300 for a shipment of x identical calculators. The merchant used 2 of the calculators as demonstrators and sold each of the others for $5 more than the average (arithmetic mean) cost of the x calculators. If the total revenue from the sale of the calculators was $120 more than the cost of the shipment, how many calculators were in the shipment?

A. 24
B. 25
C. 26
D. 28
E. 30

QUESTION 7

A survey of 500 students of DMP University, produced the information that 285 students study MBBS, 195 study BHMS, 115 study BAMS, 45 study MBBS and BAMS, 70 study MBBS and BHMS, 50 study BHMS and BAMS, and 50 study none of the three subjects. How many students study all the three subjects?

(A) 10

(B) 15
(C) 18
(D) 20
(E) 25

QUESTION 8

If the product of two positive integers is 6760 and their highest common factor is is 13, how many such unordered pairs can be formed?

(A) 1
(B) 2
(C) 3
(D) 4
(E) 5

QUESTION 9

Set M is composed of the positive even integers up to 100. Set N is composed of the odd integers from –1 to 99. What is the value of (the sum of Set M) – (the sum of Set N)?

A) 49
B) 50
C) 51
D) 100
E) 101

QUESTION 10

The average computer price today is $700. If the average computer price three years ago was 80% of the average computer price today, what was the percentage increase in the average computer price over the past three years?

A. 15%
B. 20%
C. 25%
D. 50%
E. 80%

QUESTION 11

Navjivan Express from Ahmedabad to Chennai leaves Ahmedabad at 6 : 30 am and travels at 50 km per hour towards Baroda situated 100 km away. At 7 : 00 am Howrah-Ahmedabad Express leaves Baroda towards Ahmedabad and travels at 40 km per hour. At 7 : 30 Mr. Shah, the traffic controller at Baroda realises that both the trains are running on the same track. How much time does he have to avert a head-on collision between the two trains?

(A) 15 minutes
(B) 20 minutes
(C) 25 minutes
(D) 30 minutes
(E) 35 minutes

QUESTION 12

A computer wholesaler sells eight different computers and each is priced differently. If the wholesaler chooses three computers for display at a trade show, what is the probability (all things being equal) that the two most expensive computers will be among the three chosen for display?

A) 15/56
B) 3/28
C) 1/28
D) 1/56
E) 1/168

QUESTION 13

What is the units digit of 3*38*537*1256 ?

(A) 2
(B) 4
(C) 6
(D) 8
(E) 9

QUESTION 14

A car travels from A to B at an average speed of 60mph. If the car takes the exact route on the return trip and has an average speed of 90mph from B to A, what is the average speed for the entire trip?
(A) 65 mph
(B) 72 mph
(C) 75 mph
(D) 80 mph
(E) Cannot be determined.

QUESTION 15

What is the fastest way to solve this?

(0.513)(0.488)(0.942)(0.684)(0.314)(0.183)(0.513)(0.488)(0.942)(0.684)(0.314)(0.183)

a) 4
b) 5

c) 6
d) 7
e) 8