Practice Test #2 Data Sufficiency
(218 Questions)

1.   86-!-item-!-187;#058&000060
Is m > k ?

(1) 3m > 3k

(2) 2m > 2k

2.   140-!-item-!-187;#058&000076
If k is a positive integer, is k the square of an integer?

(1) k is divisible by 4.

(2) k is divisible by exactly four different prime numbers.

3.   195-!-item-!-187;#058&000100
If w and z are positive, is $\frac{w}{z} < 1$?

(1) w < z

(2) z < 4

4.   300-!-item-!-187;#058&000133
The sale price of a certain jacket was 15 percent less than its original price, and the sale price of a certain shirt was 10 percent less than its original price.   How much greater was the original price of the jacket than the original price of the shirt?

(1)   The sale price of the jacket was $83 greater than the sale price of the shirt.

(2)   The original price of the jacket was $140.

5.   354-!-item-!-187;#058&000214
If x, y, and z are integers, is x + y + 2z even?

(1) x + z is even.

(2) y + z is even.

6.   408-!-item-!-187;#058&000218
The operation @ represents either addition, subtraction, or multiplication of integers.   What is the value of 1 @ 0 ?

(1) 0 @ 2 = 2

(2) 2 @ 0 = 2

7.   462-!-item-!-187;#058&000279
One kilogram of a certain coffee blend consists of x kilogram of type I coffee and y kilogram of type II coffee.   The cost of the blend is C dollars per kilogram, where C = 6.5x + 8.5y.   Is x < 0.8 ?

(1) y > 0.15

(2) C $\geq$ 7.30

8.   563-!-item-!-187;#058&000288
If n and p are integers, is p > 0 ?

(1) n + 1 > 0
(2) np > 0

1

9.   617-!-item-!-187;#058&000317

Each of the 105 students in a certain club is either a freshman, a sophomore, or a junior.   How many of the students in the club are sophomores?

(1)   The ratio of the number of freshmen to the number of sophomores is 1 to 2.

(2)   The ratio of the number of freshmen to the number of juniors is 1 to 4.

10.   672-!-item-!-187;#058&000324

Juan bought some paperback books that cost $8 each and some hardcover books that cost $25 each.   If Juan bought more than 10 paperback books, how many hardcover books did he buy?

(1)   The total cost of the hardcover books that Juan bought was at least $150.

(2)   The total cost of all the books that Juan bought was less than $260.

11.   726-!-item-!-187;#058&000339

What is the value of the positive integer m ?

(1)   When m is divided by 6, the remainder is 3.

(2)   When 15 is divided by m, the remainder is 6.

12.   781-!-item-!-187;#058&000341

Sets A, B, and C have some elements in common.   If 16 elements are in both A and B, 17 elements are in both A and C, and 18 elements are in both B and C, how many elements do all three of the sets A, B, and C have in common?

(1) Of the 16 elements that are in both A and B, 9 elements are also in C.

(2) A has 25 elements, B has 30 elements, and C has 35 elements.

13.   881-!-item-!-187;#058&000429

Of the people who attended a workshop, 60 percent were teachers and some of the teachers were teachers of language arts. What percent of the people who attended the workshop were teachers of language arts?

(1)   200 people attended the workshop.

(2)   72 of the teachers who attended the workshop were not teachers of language arts.

14.   935-!-item-!-187;#058&000511

Jane walked for 4 miles.   What was her average speed for the first 2 miles?

(1)   Jane's average speed for the 4 miles was 3.2 miles per hour.

(2)   It took Jane 15 minutes longer to walk the second 2 miles than it took her to walk the first 2 miles.

15.   989-!-item-!-187;#058&000579

Is $xy + xz = 0$?

(1) $x = 0$

(2) $y + z = 0$

16.   1043-!-item-!-187;#058&000590

Is $|k| = 2$?

(1) $k^2 = 4$

(2) $k = \left| -2 \right|$

17.   1097-!-item-!-187;#058&000661

2

Store S sold a total of 90 copies of a certain book during the seven days of last week, and it sold different numbers of copies on any two of the days.   If for the seven days Store S sold the greatest number of copies on Saturday and the second greatest number of copies on Friday, did Store S sell more than 11 copies on Friday?

(1)   Last week Store S sold 8 copies of the book on Thursday.

(2)   Last week Store S sold 38 copies of the book on Saturday.

18.   1151-!-item-!-187;#058&000679
Are the two nonzero integers x and y on opposite sides of 0 on the number line?

(1)   The sum of x and y is 0.

(2)   The product of x and y is less than 0.

19.   1251-!-item-!-187;#058&000852
Set S consists of five consecutive integers, and set T consists of seven consecutive integers.   Is the median of the numbers in set S equal to the median of the numbers in set T ?

(1)   The median of the numbers in set S is 0.

(2)   The sum of the numbers in set S is equal to the sum of the numbers in set T.

20.   1305-!-item-!-187;#058&000855
If -2x > 3y, is x negative?

(1) y > 0

(2) 2x + 5y - 20 = 0

21.   1407-!-item-!-187;#058&000929
Is the integer n odd?

(1) n is divisible by 3.

(2) 2n is divisible by twice as many positive integers as n.

22.   1557-!-item-!-187;#058&001222
Is $\frac{1}{p} > \frac{r}{r^2+2}$

(1) p = r

(2) r > 0

23.   1765-!-item-!-187;#058&002433

q	q	q	q
q	r	s	t
q	u	v	w
q	x	y	z

In the table above, is z = 20q ?

(1) q = 3

(2) Each value in the table other than q is equal to the sum of the value immediately above it in the table and the value immediately to its left in the table.

24.   1819-!-item-!-187;#058&002455
One member of a committee of 5 men and 8 women resigned and was not replaced.   What fraction of the remaining members were men?

3

(1) $\frac{7}{12}$ of the remaining members were women.

(2) The member who resigned was a woman.

If x and y are greater than 0, is x = 1 ?

(1) $\frac{x}{y} = 1$

(2) xy = 1

26.   1925-!-item-!-187;#058&002479
If x and y are integers, is the value of x(y + 1) even?

(1) x and y are prime numbers.

(2) y > 7

27.   2023-!-item-!-187;#058&002572
Does set S contain any even numbers?

(1) There are no prime numbers in S.

(2) There are no multiples of 4 in S.

28.   2077-!-item-!-187;#058&002573
A certain movie depicted product A in 21 scenes, product B in 7 scenes, product C in 4 scenes, and product D in 3 scenes. The four product manufacturers paid amounts proportional to the number of scenes in which their product was depicted in the movie.   If each manufacturer paid x dollars per scene, how much did the manufacturer of product D pay for this advertising?

(1) The manufacturers of products A and B together paid a total of $560,000 for this advertising.

(2) The manufacturer of product B paid $60,000 more for this advertising than the manufacturer of product C paid.

29.   2131-!-item-!-187;#058&002580
Is the positive integer n odd?

(1) n = 2k + 1, where k is a positive integer.

(2) 2n + 1 is an odd integer.

If n is an integer, is $\frac{n}{7}$ an integer?

(1) $\frac{3n}{7}$ is an integer.

(2) $\frac{5n}{7}$ is an integer.

31.   2292-!-item-!-187;#058&002682
If a wire 27 meters long is cut into three pieces of three different lengths, what is the length of the longest piece?

(1) The length of the longest piece is twice the length of the shortest piece.

(2) The sum of the lengths of the two shorter pieces is 15 meters.

Is positive integer n divisible by 3 ?

(1) $\frac{n^2}{36}$ is an integer.

(2) $\frac{144}{n^2}$ is an integer.

33.   2446-!-item-!-187;#058&002780

If a > 0, b > 0, and c > 0, is a(b - c) = 0 ?

(1)   b – c = c - b

(2) $\frac{b}{c}$ = $\frac{c}{b}$

34.   2500-!-item-!-187;#058&002904

Are positive integers p and q both greater than n ?

(1) p - q is greater than n .

(2) q > p

35.   2600-!-item-!-187;#058&002931

What is the value of xy ?

(1) y = x + 1

(2) y = x² + 1

36.   2847-!-item-!-187;#058&003085

If ax + b = 0, is x > 0 ?

(1) a + b > 0

(2) a - b > 0

37.   3042-!-item-!-187;#058&003156

Are the integers z and f to the right of 0 on the number line?

(1)   The product of z and f is positive.

(2)   The sum of z and f is positive.

38.   3096-!-item-!-187;#058&003188

Some of the students enrolled at College T are part-time students and the rest are full-time students.   By what percent did the number of full-time students enrolled at College T increase from the fall of 1999 to the fall of 2000 ?

(1)   There were 50 more full-time students enrolled at College T in the fall of 2000 than in the fall of 1999.

(2)   The total number of students enrolled at College T increased by 5 percent from the fall of 1999 to the fall of 2000.

39.   3150-!-item-!-187;#058&003215

If c and d are integers, is c even?

(1) c(d + 1) is even.

(2) (c + 2)(d + 4) is even.

40.   3204-!-item-!-187;#058&003218

If set S consists of the numbers 1, 5, -2, 8, and n, is 0 < n < 7 ?

(1)   The median of the numbers in S is less than 5.

(2)   The median of the numbers in S is greater than 1.

41.   3308-!-item-!-187;#058&003278
Last Thursday, John assembled chairs at a rate of 3 chairs per hour for part of the day and Larry assembled no chairs.   Last Friday, Larry assembled chairs at a rate of 4 chairs per hour for part of the day and John assembled no chairs.   If John and Larry assembled chairs for a total of 7 hours during these two days, how many chairs did John assemble last Thursday?

(1)   During these two days, John and Larry assembled a total of 25 chairs.

(2)   During these two days, Larry assembled more chairs than John did.

42.   3362-!-item-!-187;#058&003280
What is the value of 3n - 4 ?

(1) 6n − 10 = 30

(2) $\frac{n}{3} = \frac{20}{9}$

43.   3416-!-item-!-187;#058&003281
Circle C and line k lie in the xy-plane.   If circle C is centered at the origin and has radius 1, does line k intersect circle C ?

(1)   The x-intercept of line k is greater than 1.

(2)   The slope of line k is $-\frac{1}{10}$.

44.   3524-!-item-!-187;#058&003319
How many people received a certain survey?

(1)   Six-tenths of those who received the survey responded.

(2)   Of those who received the survey, 42 responded.

45.   3824-!-item-!-187;#058&003586
If x and z are integers, is at least one of them even?

(1) x + z is odd.

(2) x - z is odd.

46.   3927-!-item-!-187;#058&003647
Three thousand families live in a certain town.   How many families who live in the town own neither a car nor a television set?

(1)   Of the families who live in the town, 2,980 own a car.

(2)   Of the families who live in the town, 2,970 own both a car and a television set.

47.   3982-!-item-!-187;#058&003679
In the fraction $\frac{x}{y}$, where x and y are positive integers, what is the value of y ?

(1)   The least common denominator of $\frac{x}{y}$ and $\frac{1}{3}$ is 6.

(2)   x = 1.

48.   4036-!-item-!-187;#058&003710
There are two types of rolls on a counter, plain rolls and seeded rolls.   What is the total number of rolls on the counter?

(1)   The ratio of the number of seeded rolls on the counter to the number of plain rolls on the counter is 1 to 5.

(2)   There are 16 more plain rolls than seeded rolls on the counter.

49.   4090-!-item-!-187;#058&003782
Is the hundredths digit of the decimal d greater than 5 ?

(1)   The tenths digit of 10d is 7.

(2)   The thousandths digit of $\frac{d}{10}$ is 7.

50.   4144-!-item-!-187;#058&003797
What is the value of 2x + 2y ?

(1)   3x + 5y = 60

(2)   5x + 3y = 68

51.   4198-!-item-!-187;#058&003817
Whenever Martin has a restaurant bill with an amount between $10 and $99, he calculates the dollar amount of the tip as 2 times the tens digit of the amount of his bill.   If the amount of Martin's most recent restaurant bill was between $10 and $99, was the tip calculated by Martin on this bill greater than 15 percent of the amount of the bill?

(1)   The amount of the bill was between $15 and $50.

(2)   The tip calculated by Martin was $8.

52.   4349-!-item-!-187;#058&003856
For Manufacturer M, the cost C of producing x units of its product per month is given by C = kx + t, where C is in dollars and k and t are constants.   Last month, if Manufacturer M produced 1,000 units of its product and sold all the units for k + 60 dollars each, what was Manufacturer M's gross profit on the 1,000 units?

(1)   Last month, Manufacturer M's revenue from the sale of the 1,000 units was $150,000.

(2)   Manufacturer M's cost of producing 500 units in a month is $45,000 less than its cost of producing 1,000 units in a month.

53.   4404-!-item-!-187;#058&003880
The symbol @ represents one of the four arithmetic operations: addition, subtraction, multiplication, and division.

Is (5 @ 6) @ 2 = 5 @ (6 @ 2) ?

(1) 5 @ 6 = 6 @ 5

(2) 2 @ 0 = 2

54.   4458-!-item-!-187;#058&003882
If y is an integer and y = |x | + x, is y = 0 ?

(1) x < 0

(2) y < 1

55.   4604-!-item-!-187;#058&003931
Is the positive integer n an odd integer?

(1) n + 4 is a prime number.

(2) n + 3 is not a prime number.

56.   4658-!-item-!-187;#058&003940

7

What is the total surface area of rectangular solid R ?

(1) The surface area of one of the faces of R is 48.

(2) The length of one of the edges of R is 3.

57.   4761-!-item-!-187;#058&003968
A certain list consists of several different integers.   Is the product of all the integers in the list positive?

(1) The product of the greatest and smallest of the integers in the list is positive.

(2) There is an even number of integers in the list.

58.   4863-!-item-!-187;#058&004007
A certain store sells chairs individually or in sets of 6.   The store charges less for purchasing a set of 6 chairs than for purchasing 6 chairs individually.   How much does the store charge for purchasing a set of 6 chairs?

(1) The charge for purchasing a set of 6 chairs is 10 percent less than the charge for purchasing the 6 chairs individually.

(2) The charge for purchasing a set of 6 chairs is $20 more than the charge for purchasing 5 chairs individually.

59.   4918-!-item-!-187;#058&004054
If $k \neq 0, 1,$ or -1, is $\frac{1}{k} > 0$?

(1) $\frac{1}{k-1} > 0$

(2) $\frac{1}{k+1} > 0$

60.   4972-!-item-!-187;#058&004074
Does the integer k have a factor p such that $1 < p < k$?

(1) k > 4!

(2) $13! + 2 \leq k \leq 13! + 13$

61.   5072-!-item-!-187;#058&004127
When the positive integer n is divided by 25, the remainder is 13.   What is the value of n ?

(1) n < 100

(2) When n is divided by 20, the remainder is 3.

62.   5126-!-item-!-187;#058&004141
If $y \geq 0$, what is the value of x ?
(1) $|x - 3| \geq y$

(2) $|x - 3| \leq -y$

63.   5228-!-item-!-187;#058&004178
If m is a positive odd integer, what is the average (arithmetic mean) of a certain set of m integers?

(1) The integers in the set are consecutive multiples of 3.

(2) The median of the set of integers is 33.

64.   5329-!-item-!-187;#058&004211
If $a < y < z < b$, is $|y - a| < |y - b|$?

(1) $|z - a| < |z - b|$

(2) |y - a | < |z - b |

65.   5432-!-item-!-187;#058&004252
If ab ≠ 0 and points (-a, b) and (-b, a) are in the same quadrant of the xy-plane, is point (-x, y) in this same quadrant?

(1) xy > 0

(2) ax > 0

66.   5486-!-item-!-187;#058&004317
If q is a positive integer less than 17 and r is the remainder when 17 is divided by q, what is the value of r ?

(1) q > 10

(2) q = 2^k, where k is a positive integer.

What is the ratio of the number of cups of flour to the number of cups of sugar required in a certain cake recipe?

(1) The number of cups of flour required in the recipe is 250 percent of the number of cups of sugar required in the recipe.

(2) $1\frac{1}{2}$ more cups of flour than cups of sugar are required in the recipe.

In 1999 Company X's gross profit was what percent of its revenue?

(1)   In 1999 Company X's gross profit was $\frac{1}{3}$ of its expenses.

(2)   In 1999 Company X's expenses were $\frac{3}{4}$ of its revenue.

69.   5791-!-item-!-187;#058&004570
At the bakery, Lew spent a total of $6.00 for one kind of cupcake and one kind of doughnut.   How many doughnuts did he buy?

(1)   The price of 2 doughnuts was $0.10 less than the price of 3 cupcakes.

(2)   The average (arithmetic mean) price of 1 doughnut and 1 cupcake was $0.35.

70.   6564-!-item-!-187;#058&004850
If eleven consecutive integers are listed from least to greatest, what is the average (arithmetic mean) of the eleven integers?

(1)   The average of the first nine integers is 7.

(2)   The average of the last nine integers is 9.

What is the greatest integer that is less than t ?

(1) t = $\frac{9}{4}$

(2) t = $(\frac{-3}{2})^2$

Of the 4,800 voters who voted for or against Resolution K, 1800 were Democrats and 3,000 were Republicans.   What was the total number of female voters who voted for Resolution K ?

(1) $\frac{3}{4}$ of the Democrats and $\frac{2}{3}$ of the Republicans voted for Resolution K.

(2) $\frac{1}{3}$ of the Democrats who voted for Resolution K and $\frac{1}{2}$ of the Republicans who voted for Resolution K were females.

73.   6922-!-item-!-187;#058&005032
If n is a positive integer, is $n^3 - n$ divisible by 4 ?

(1) n = 2k + 1, where k is an integer.

(2) $n^2 + n$ is divisible by 6.

74.   6977-!-item-!-187;#058&005035
If x ≠ -y, is $\frac{x-y}{x+y}$ > 1 ?

(1) x > 0

(2) y < 0

75.   7031-!-item-!-187;#058&005040
A certain group of car dealerships agreed to donate x dollars to a Red Cross chapter for each car sold during a 30-day period. What was the total amount that was expected to be donated?

(1)   A total of 500 cars were expected to be sold.

(2)   60 more cars were sold than expected, so that the total amount actually donated was $28,000.

76.   7085-!-item-!-187;#058&005061
Over a certain time period, did the number of shares of stock in Ruth's portfolio increase?

(1) Over the time period, the ratio of the number of shares of stock to the total number of shares of stocks and bonds in Ruth's portfolio increased.

(2) Over the time period, the total number of shares of stocks and bonds in Ruth's portfolio increased.

77.   7139-!-item-!-187;#058&005072
Is |x | = y - z ?

(1) x + y = z

(2) x < 0

78.   7339-!-item-!-187;#058&005310
If n is an integer, is $-3x^n$ positive?

(1) x is negative.

(2) n is odd.

79.   7535-!-item-!-187;#058&005487
If n is an integer between 2 and 100 and if n is also the square of an integer, what is the value of n ?

(1) n is even.

(2) The cube root of n is an integer.

80.   7589-!-item-!-187;#058&005492
If x and y are positive integers such that x = 8y + 12, what is the greatest common divisor of x and y ?

(1) x = 12u, where u is an integer.

(2) y = 12z, where z is an integer.

81.   7692-!-item-!-187;#058&005524
At a certain bakery, each roll costs r cents and each doughnut costs d cents.   If Alfredo bought rolls and doughnuts at the bakery, how many cents did he pay for each roll?

(1)   Alfredo paid $5.00 for 8 rolls and 6 doughnuts.

(2)   Alfredo would have paid $10.00 if he had bought 16 rolls and 12 doughnuts.

82.   7746-!-item-!-187;#058&005794
Is x > 0 ?

(1) xy > 0

(2) x + y > 0

83.   7800-!-item-!-187;#058&005796
How much time did it take a certain car to travel 400 kilometers?

(1) The car traveled the first 200 kilometers in 2.5 hours.

(2) If the car's average speed had been 20 kilometers per hour greater than it was, it would have traveled the 400 kilometers in 1 hour less time than it did.

84.   7854-!-item-!-187;#058&005813
Each of the offices in a certain building has a floor area of 200, 300, or 350 square feet.   How many offices are on the first floor of the building?

(1)   There is a total of 9,500 square feet of office floor space on the first floor of the building.

(2)   Ten of the offices on the first floor have floor areas of 350 square feet each.

85.   7908-!-item-!-187;#058&005852
Is n divisible by 12 ?

(1) $\frac{n}{6}$ is an integer.

(2) $\frac{n}{4}$ is an integer.

86.   7962-!-item-!-187;#058&005867
Do more than 50 percent of the children in a certain group have brown hair?

(1)   70 percent of the boys in the group have brown hair.

(2)   30 percent of the children in the group are girls with brown hair.

87.   8062-!-item-!-187;#058&006016
Is the integer n a multiple of 15 ?

(1) n is a multiple of 20.

(2) n + 6 is a multiple of 3.

88.   8117-!-item-!-187;#058&006040
If x + y ≠ 0, what is the value of $\frac{ax+ay}{x+y}$?

(1) x = 4 and y = 5.

(2) a = 6

89.   8171-!-item-!-187;#058&006095
What is the ratio of p to r ?

(1)   The ratio of p to 3r is 5 to 9.

(2)   The sum of p and r is 16.

90.   8271-!-item-!-187;#058&006138
What is the value of $a^4 - b^4$?

(1) $a^2 - b^2 = 16$

(2) a + b = 8

91.   8325-!-item-!-187;#058&006143
In the rectangular coordinate system, are the points (r, s) and (u, v) equidistant from the origin?

(1) r + s = 1

(2) u = 1 - r and v = 1 - s.

92.   8570-!-item-!-187;#058&006483
X and Y are sets of positive integers.   Is the greatest integer in X greater than the greatest integer in Y ?

(1) X is a set of 5 consecutive odd integers, each less than 20.

(2) Y is a set of 3 consecutive even integers, each less than 15.

93.   8624-!-item-!-187;#058&006485
The lifetimes of all the batteries produced by a certain company in a year have a distribution that is symmetric about the mean m.   If the distribution has a standard deviation of d, what percent of the distribution is greater than m + d ?

(1) 68 percent of the distribution lies in the interval from m - d to m + d, inclusive.

(2) 16 percent of the distribution is less than m - d.

94.   8775-!-item-!-187;#058&006653
If |x + 2| = 4, what is the value of x ?

(1) $x^2 \neq 4$

(2) $x^2 = 36$

95.   8829-!-item-!-187;#058&006700
If v and w are different integers, does v = 0 ?

(1) $vw = v^2$

(2) w = 2

96.   8932-!-item-!-187;#058&006783
Is $\sqrt{(x-5)^2} = 5 - x$

(1) $-x|x| > 0$

(2) 5 - x > 0

97.   8986-!-item-!-187;#058&006790
What is the median of a certain set of 7 numbers?

(1)   3 of the numbers are less than 10.

(2)   4 of the numbers are greater than 10.

Is $x + y < 1$?

(1) $x < \frac{8}{9}$

(2) $y < \frac{1}{8}$

99.   9094-!-item-!-187;#058&006821
For each home sold in County X, the buyer and the seller each must pay to County X a tax of 0.5 percent of the sale price of the home.   Colleen recently sold her old home and bought a new home, both in County X.   What was the total tax that Colleen paid to County X on these home sales?
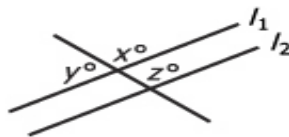
(1)   Colleen's old home had a sale price of $169,500.

(2)   Colleen's new home had a sale price 20% greater than that of her old home.

100.   9148-!-item-!-187;#058&006857
A certain bank charges a maintenance fee on a standard checking account each month that the balance falls below $1,000 at any time during the month.   Did the bank charge a maintenance fee on Sue's standard checking account last month?

(1)   At the beginning of last month, Sue's account balance was $1,500.

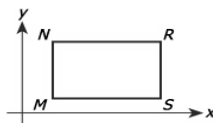(2)   During last month, a total of $2,000 was withdrawn from Sue's checking account.

In the figure above, lines l_1 and l_2 are parallel.   What is the value of x ?

(1) y = 87

(2) z = 93

In the coordinate plane above, what is the area of rectangular region MNRS ?

(1) M has coordinates (2, 1).

(2) N has coordinates (2, 5).

103.   9889-!-item-!-187;#058&007222
How much did the taxi driver charge George for the trip to the airport?

(1)   George paid the taxi driver a tip equal to 15 percent of the amount the driver charged.

(2)   George paid the taxi driver a tip of $6.00.

104.   9943-!-item-!-187;#058&007224
A child selected a three-digit number, XYZ, where X, Y, and Z denote the digits of the number.   If no two of the three digits were equal, what was the three-digit number?

(1) The sum of the digits was 10.

(2) X < Y < Z

If b is positive, is ab positive?

(1) $a^2b > 0$

(2) $a^2 + b = 13$

106.   10051-!-item-!-187;#058&007251
Robin split a total of $24,000 between two investments, X and Y.   If investment Y earns 7 percent simple annual interest, how much of the total did Robin put into investment Y ?

(1)   Each investment earns the same dollar amount of interest annually.

(2)   Investment X earns 5 percent simple annual interest.

107.   10578-!-item-!-187;#058&007600
Is $2x - 3y < x^2$?

(1) $2x - 3y = -2$

(2) x > 2 and y > 0.

108.   10635-!-item-!-187;#058&007601
If $\frac{x}{2} = \frac{3}{y}$, is x less than y ?

(1) $y \geq 3$

(2) $y \leq 4$

109.   11067-!-item-!-187;#058&007824
Marta bought several pencils.   If each pencil was either a 23-cent pencil or a 21-cent pencil, how many 23-cent pencils did Marta buy?

(1)   Marta bought a total of 6 pencils.

(2)   The total value of the pencils Marta bought was 130 cents.

110.   11121-!-item-!-187;#058&007826
If x and y are integers and x > 0, is y > 0 ?

(1)   7x - 2y > 0

(2)   -y < x

111.   11229-!-item-!-187;#058&007982
A state legislature had a total of 96 members.   The members who did not vote on a certain bill consisted of 25 who were absent and 3 who abstained.   How many of those voting voted for the bill?

(1)   Exactly $\frac{1}{3}$ of the total membership of the legislature voted against the bill.

(2)   The number of Legislators who voted for the bill was 8 more than the total number who were absent or abstained.

112.   11432-!-item-!-187;#058&008149
If m and n are positive integers and mn = k, is m + n = k + 1 ?

(1) m = 1

(2) k is a prime number.

113.   11488-!-item-!-187;#058&008235
In a certain year the United Nations' total expenditures were $1.6 billion.   Of this amount, 67.8 percent was paid by the 6 highest-contributing countries, and the balance was paid by the remaining 153 countries.   Was Country X among the 6 highest-contributing countries?

(1) 56 percent of the total expenditures was paid by the 4 highest-contributing countries, each of which paid more than Country X.

(2) Country X paid 4.8 percent of the total expenditures.

114.   11543-!-item-!-187;#058&008310
If $\frac{x+y}{z}$ = -2, is x positive?

(1) z is negative.

(2) y is positive.

115.   11595-!-item-!-187;#058&008332
List S and list T each contain 5 positive integers, and for each list the average (arithmetic mean) of the integers in the list is 40.   If the integers 30, 40, and 50 are in both lists, is the standard deviation of the integers in list S greater than the standard deviation of the integers in list T ?

   (1)   The integer 25 is in list S.

   (2)   The integer 45 is in list T.

116.   11649-!-item-!-187;#058&008377
On the number line, what is the distance between the point 2x and the point 3x ?

(1)   On the number line, the distance between the point -x and the point x is 16.

(2)   On the number line, the distance between the point x and the point 3x is 16.

117.   11703-!-item-!-187;#058&008423
What is the remainder when the positive integer n is divided by the positive integer k, where k > 1 ?

(1) n = (k + 1)^3

(2) k = 5

118.   11804-!-item-!-187;#058&008456
Is x $\geq$ 3 ?

(1) $x^2 - 9 = 0$

(2) x < 10

119.   11954-!-item-!-187;#058&008495
At a two-candidate election for mayor, $\frac{3}{4}$ of the registered voters cast ballots.   How many registered voters cast ballots for the winning candidate?

(1)   25,000 registered voters did not cast ballots in the election.

(2)   Of the registered voters who cast ballots, 55 percent cast ballots for the winning candidate.

120.   12295-!-item-!-187;#058&008940
If n is the product of the least and the greatest of 6 consecutive integers, what is the value of n ?

(1)   The greatest of the 6 consecutive integers is 20.

(2)   The average (arithmetic mean) of the 6 consecutive integers is 17.5.

121.   12397-!-item-!-187;#058&009033
If n and s are each 2-digit positive integers, is n greater than s ?

(1)   The units digit of n is greater than the units digit of s.

(2)   The tens digit of n is greater than the tens digit of s.

122.   12685-!-item-!-187;#058&009461
If n is a positive integer and r is the remainder when (n - 1)(n + 1) is divided by 24, what is the value of r ?

(1)   2 is not a factor of n.

(2)   3 is not a factor of n.

123.   12975-!-item-!-187;#058&009772
When positive integer n is divided by 3, the remainder is 2; and when positive integer t is divided by 5, the remainder is 3. What is the remainder when the product nt is divided by 15 ?

(1) n - 2 is divisible by 5.

(2) t is divisible by 3.

124.   13029-!-item-!-187;#058&009789
A certain motel has a total of 540 units, each of which has a 1-person, 2-person, or 4-person capacity.   How many people stayed in the motel's 4-person units yesterday?

(1)   At this motel, $\frac{1}{3}$ of the units are 4-person units.

(2)   Yesterday, 80 percent of the 4-person units in the motel were filled to capacity, and the rest of the 4-person units were empty.

125.   13274-!-item-!-187;#058&009989
If @ denotes one of two arithmetic operations, addition or multiplication, and if k is an integer, what is the value of 3 @ k ?

(1)   2 @ k = 3

(2)   1 @ 0 = k

126.   13661-!-item-!-187;#058&010116
If r and t are positive integers, is rt even?

(1)   r + t is odd.

(2) r^{t} is odd.

127.   13762-!-item-!-187;#058&010132
If $\frac{2}{5}$ of the students at College C are business majors, what is the number of female students at College C ?

(1) $\frac{2}{5}$ of the male students at College C are business majors.

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(2)   200 of the female students at College C are business majors.

Is $y < \frac{x+z}{2}$?

(1) y - x < z - y

(2) z - y < $\frac{z-x}{2}$

If t is a positive integer and r is the remainder when $t^2 + 5t + 6$ is divided by 7, what is the value of r ?

(1) When t is divided by 7, the remainder is 6.

(2) When t^2 is divided by 7, the remainder is 1.

Set S consists of 20 different positive integers. How many of the integers in S are odd?

(1)   10 of the integers in S are even.

(2)   10 of the integers in S are multiples of 4.

If w + x < 0, is w - y > 0 ?

(1) x + y < 0

(2) y < x < w

If the drama club and music club are combined, what percent of the combined membership will be male?

(1)   Of the 16 members of the drama club, 15 are male.

(2)   Of the 20 members of the music club, 10 are male.

What is the average (arithmetic mean) height of the n people in a certain group?

(1)   The average height of the $\frac{n}{3}$ tallest people n the group is 6 feet $2\frac{1}{2}$ inches, and the average height of the rest of the people n the group is f feet 10 inches.

(2)   The sum of the heights of the n people is 178 feet 9 inches.

If m and n are integers, is m odd?

(1) n + m is odd.

(2) n + m = n^2 + 5.

How many more first-time jobless claims were filed in week P than in week T ?

(1)   For weeks P, Q, R, and S, the average (arithmetic mean) number of first-time jobless claims filed was 388,250.

(2)   For weeks Q, R, S, and T, the average (arithmetic mean) number of first-time jobless claims filed was 383,000.

136.   14393-!-item-!-187;#058&010357

x, 3, 1, 12, 8

If x is an integer, is the median of the 5 numbers shown greater than the average (arithmetic mean) of the 5 numbers?

(1) x > 6

(2) x is greater than the median of the 5 numbers.

137.   14447-!-item-!-187;#058&010361
If x and y are positive integers, is xy a multiple of 8 ?

(1)   The greatest common divisor of x and y is 10.

(2)   The least common multiple of x and y is 100.

138.   14501-!-item-!-187;#058&010393
If zy < xy < 0, is |x - z | + |x | = |z | ?

(1) z < x

(2) y > 0

139.   14556-!-item-!-187;#058&010396
If machine J, working alone at its constant rate, takes 2 minutes to wrap 60 pieces of candy, how many minutes does it take machine K, working alone at its constant rate, to wrap 120 pieces of candy?

(1) Machine K, working alone at its constant rate, takes more than 5 minutes to wrap 60 pieces of candy.

(2) Machines J and K, working together at their respective constant rates, take 1 minute and 30 seconds to wrap 60 pieces of candy.

140.   14610-!-item-!-187;#058&010398
A manufacturer produced x percent more video cameras in 1994 than in 1993 and y percent more video cameras in 1995 than in 1994.   If the manufacturer produced 1,000 video cameras in 1993, how many video cameras did the manufacturer produce in 1995 ?

(1) xy = 20

(2) x + y + $\frac{xy}{100}$ = 9.2

141.   14664-!-item-!-187;#058&010407
Of the 20 people who each purchased 2 tickets to a concert, some used both tickets, some used only 1 ticket, and some used neither ticket.   What percent of the tickets that were purchased by the 20 people were used by those people?

(1)   Of the 20 people, 10 used only 1 ticket.

(2)   Of the 20 people, 4 used neither ticket.

142.   14718-!-item-!-187;#058&010409
At a certain stand, all soft drinks cost the same and all sandwiches cost the same.   How much does 1 sandwich cost at the stand?

(1)   At the stand, 1 sandwich and 2 soft drinks cost a total of $3.15.

(2)   At the stand, 3 sandwiches and 1 soft drink cost a total of $5.70.

143.   14772-!-item-!-187;#058&010415
If K is a positive three-digit integer, what is the hundreds digit of K ?

(1)   The hundreds digit of K + 150 is 4.

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(2)   The tens digit of K + 25 is 7.

144.   14826-!-item-!-187;#058&010416
In the xy-plane, point P has coordinates (a, b) and point Q has coordinates (c, d).   What is the distance between P and Q ?

(1) b - d = 4

(2) a - c = 3

145.   14880-!-item-!-187;#058&010418
If a, b, and c are positive integers, is b between a and c ?

(1) b is 3 greater than a, and b is 5 less than c.

(2) c is 5 greater than b, and c is 8 greater than a.

146.   14980-!-item-!-187;#058&010478
At a certain refreshment stand, all hot dogs have the same price and all sodas have the same price.   What is the total price of 3 hot dogs and 2 sodas at the refreshment stand?

(1)   The total price of 5 sodas at the stand is less than the total price of 2 hot dogs.

(2)   The total price of 9 hot dogs and 6 sodas at the stand is $21.

147.   15034-!-item-!-187;#058&010480
If a certain company purchased computers at $2,000 each and printers at $300 each, how many computers did it purchase?

(1)   More than three printers were purchased.

(2)   The total amount for the purchase of the computers and the printers was $15,000.

148.   15274-!-item-!-187;#058&010713
If x = 3 and y = 6, is y > nx + k ?

(1) n = 5

(2) k = -10

149.   15328-!-item-!-187;#058&010715
Does x + c = y + c ?

(1) x = y

(2) x = c

150.   15382-!-item-!-187;#058&010719
If n is an integer between 3 and 9, what is the value of n ?

(1)   On the number line, the distance from 3 to n is $\frac{2}{3}$ of the distance from 3 to 9.

(2)   On the number line, n is 10 units to the right of -3

151.   15486-!-item-!-187;#058&010743
Is the average (arithmetic mean) of 5 different positive integers at least 30 ?

(1)   Each of the integers is a multiple of 10.

(2)   The sum of the 5 integers is 160.

152.   15540-!-item-!-187;#058&010751

A certain jar contains only b black marbles, w white marbles, and r red marbles.   If one marble is to be chosen at random from the jar, is the probability that the marble chosen will be red greater than the probability that the marble chosen will be white?

(1) $\frac{r}{b+w} > \frac{w}{b+r}$

(2) $b - w > r$

153.   15687-!-item-!-187;#058&010776
On his trip from Alba to Benton, Julio drove the first x miles at an average rate of 50 miles per hour and the remaining distance at an average rate of 60 miles per hour.   How long did it take Julio to drive the first x miles?

(1)   On this trip, Julio drove for a total of 10 hours and drove a total of 530 miles.

(2)   On this trip, it took Julio 4 more hours to drive the first x miles than to drive the remaining distance.

154.   15741-!-item-!-187;#058&010784
To install cable television in a home, a certain cable company charges a basic fee of $30 plus a fee of $20 for each cable outlet installed in the home.   How much did the cable company charge the Horace family for installing cable television in their home?

(1) The cable company installed three cable outlets in the Horace family home.

(2) The amount that the cable company charged the Horace family for installing cable television in their home was equivalent to an average (arithmetic mean) charge of $30 per cable outlet installed.

155.   15795-!-item-!-187;#058&010817
If 500 is the multiple of 100 that is closest to x and 400 is the multiple of 100 that is closest to y, which multiple of 100 is closest to x + y ?

(1) x < 500

(2) y < 400

156.   15849-!-item-!-187;#058&010825
Each of the numbers w, x, y, and z is equal to either 0 or 1.   What is the value of w + x + y + z ?

(1) $\frac{w}{2} + \frac{x}{4} + \frac{y}{8} + \frac{z}{16} = \frac{11}{16}$

(2) $\frac{w}{3} + \frac{x}{9} + \frac{y}{27} + \frac{z}{81} = \frac{31}{81}$

157.   15904-!-item-!-187;#058&010840
A certain list consists of five <u>different</u> integers.   Is the average (arithmetic mean) of the two greatest integers in the list greater than 70 ?

(1)   The median of the integers in the list is 70.

(2)   The average of the integers in the list is 70.

158.   15958-!-item-!-187;#058&010868
A store purchased 20 coats that each cost an equal amount and then sold each of the 20 coats at an equal price.   What was the store's gross profit on the 20 coats?

(1)   If the selling price per coat had been twice as much, the store's gross profit on the 20 coats would have been $2,400.

(2)   If the selling price per coat had been $2 more, the store's gross profit on the 20 coats would have been $440.

159.   16012-!-item-!-187;#058&010902
Beth and Jim each received a salary increase.   If Jim's salary was increased by the same percent as Beth's salary, did Beth receive a greater dollar increase in salary than Jim?

(1) Before the increases, Jim's salary was greater than $25,000.

(2) Before the increases, Jim's salary was $\frac{4}{5}$ of Beth's salary.

160.   16066-!-item-!-187;#058&010935
All the clients that Company X had at the beginning of last year remained with the company for the whole year.   If Company X acquired new clients during the year, what was the ratio of the number of clients that Company X had at the end of last year to the number of clients that it had at the beginning of last year?

(1) The ratio of the number of clients that Company X had at the beginning of last year to the number of new clients that it acquired during the year was 12 to 1.

(2) Company X had 144 clients at the beginning of last year.

161.   16120-!-item-!-187;#058&010949
In the xy-coordinate plane, line m and line k intersect at the point (4, 3).   Is the product of their slopes negative?

(1)   The product of the x-intercepts of lines m and k is positive.

(2)   The product of the y-intercepts of lines m and k is negative.

162.   16220-!-item-!-187;#058&011014
If n is a positive integer and r is the remainder when n^2 - 1 is divided by 8, what is the value of r ?

(1) n is odd.

(2) n is not divisible by 8.

163.   16419-!-item-!-187;#058&011075
In a certain election, 240 men and 280 women voted for the winning candidate.   What was the total number of men and women who voted in the election?

(1) The number of women who voted was $\frac{7}{8}$ the number of men who voted.

(2) Of the men and women who voted, 30 percent of the men and 40 percent of the women voted for the winning candidate.

164.   16473-!-item-!-187;#058&011078
If mv < pv < 0, is v > 0 ?

(1) m < p

(2) m < 0

165.   16527-!-item-!-187;#058&011081
If x and y are points on the number line, what is the value of x + y ?

(1) 6 is halfway between x and y.

(2) y = 2x

166.   16673-!-item-!-187;#058&011115
If the prime numbers p and t are the only prime factors of the integer m, is m a multiple of p^2t ?

(1) m has more than 9 positive factors.

(2) m is a multiple of p^3.

167.   16727-!-item-!-187;#058&011198
A certain circular area has its center at point P and has radius 4, and points X and Y lie in the same plane as the circular area.

Does point Y lie outside the circular area?

(1)   The distance between point P and point X is 4.5.

(2)   The distance between point X and point Y is 9.

168.   16781-!-item-!-187;#058&011242
In a certain senior class, 72 percent of the male students and 80 percent of the female students have applied to college. What fraction of the students in the senior class are male?

(1)   There are 840 students in the senior class.

(2)   75 percent of the students in the senior class have applied to college.

169.   16835-!-item-!-187;#058&011243
Greta and Randy collected bottles to be recycled. How many bottles did Randy collect?

(1)   Greta and Randy collected a total of 85 bottles.

(2)   Greta collected 15 more bottles than Randy did.

170.   16889-!-item-!-187;#058&011265
If $zt < -3$, is $z < 4$?

(1) $z < 9$

(2) $t < -4$

171.   16943-!-item-!-187;#058&011304
If k is a positive integer and the tens digit of $k + 5$ is 4, what is the tens digit of k ?

(1) $k > 35$

(2) The units digit of k is greater than 5.

172.   17043-!-item-!-187;#058&011315
If a and b are nonzero numbers on the number line, is 0 between a and b ?

(1) The distance between 0 and a is greater than the distance between 0 and b.

(2) The sum of the distances between 0 and a and between 0 and b is greater than the distance between 0 and the sum a + b .

173.   17097-!-item-!-187;#058&011316
In the xy-plane, line k passes through the point (1,1) and line m passes through the point (1,-1).   Are lines k and m perpendicular to each other?

(1) Lines k and m intersect at the point (1,-1).

(2) Line k intersects the x-axis at the point (1,0).

174.   17151-!-item-!-187;#058&011360
Each week Connie receives a base salary of $500, plus a 20 percent commission on the total amount of her sales that week in excess of $1,500.   What was the total amount of Connie's sales last week?

(1)   Last week Connie's base salary and commission totaled $1,200.

(2)   Last week Connie's commission was $700.

175.   17205-!-item-!-187;#058&011383
Ann bought five different kinds of fruit: apples, oranges, pears, mangoes, and bananas.   If the number of apples that Ann bought was twice the number of oranges and if the number of pears that Ann bought was the same as the number of apples

and oranges combined, what fraction of the total number of pieces of fruit that Ann bought were pears?

(1)   Ann bought a total of 18 pieces of fruit.

(2)   Ann bought 5 bananas.

176.   17259-!-item-!-187;#058&011402
In 1995 Division A of Company X had 4,850 customers.   If there were 86 service errors in Division A that year, what was the service-error rate, in number of service errors per 100 customers, for Division B of Company X in 1995 ?

(1) In 1995 the overall service-error rate for Divisions A and B combined was 1.5 service errors per 100 customers.

(2) In 1995 Division B had 9,350 customers, none of whom were customers of Division A.

177.   17313-!-item-!-187;#058&011410
If x and y are positive integers, is x an even integer?

(1) x (y + 5) is an even integer.

(2) $6y^2$+ 41y + 25 is an even integer.

178.   17370-!-item-!-187;#058&011434

In the figure shown, point O is the center of the semicircle and points B, C, and D lie on the semicircle.   If the length of line segment AB is equal to the length of line segment OC, what is the degree measure of angle BAO ?

(1)   The degree measure of angle COD is 60.

(2)   The degree measure of angle BCO is 40.

179.   17563-!-item-!-187;#058&011544
Working independently at their respective constant rates, pumps X and Y took 48 minutes to fill an empty tank with water. What fraction of the water in the full tank came from pump X ?

(1) Working alone at its constant rate, pump X would have taken 80 minutes to fill the tank with water.

(2) Working alone at its constant rate, pump Y would have taken 120 minutes to fill the tank with water.

180.   17617-!-item-!-187;#058&011567
What is the value of $v^3 - k^3$?

(1) vk > 0

(2) v - k = 6

181.   17723-!-item-!-187;#058&011591
Rasheed bought two kinds of candy bars, chocolate and toffee, that came in packages of 2 bars each.   He handed out $\frac{2}{3}$ of the chocolate bars and $\frac{3}{5}$ of the toffee bars.   How many packages of chocolate bars did Rasheed buy?

(1)   Rasheed bought 1 fewer package of chocolate bars than toffee bars.

(2)   Rasheed handed out the same number of each kind of candy bar.

182.   17777-!-item-!-187;#058&011599
If m and r are two numbers on a number line, what is the value of r ?

(1)   The distance between r and 0 is 3 times the distance between m and 0 .

(2)   12 is halfway between m and r.

183.   17831-!-item-!-187;#058&011633
If m is a positive <u>odd</u> integer between 2 and 30, then m is divisible by how many different positive prime numbers?

(1) m is not divisible by 3.

(2) m is not divisible by 5.

184.   17933-!-item-!-187;#058&011666
If k is an integer greater than 1, is k equal to 2^r for some positive integer r ?

(1) k is divisible by 2^6.

(2) k is <u>not</u> divisible by any odd integer greater than 1.

185.   17987-!-item-!-187;#058&011677
Of the 200 members of a certain association, each member who speaks German also speaks English, and 70 of the members speak only Spanish.   If no member speaks all three languages, how many of the members speak two of the three languages?

(1)   60 of the members speak only English.

(2)   20 of the members do not speak any of the three languages.

186.   18041-!-item-!-187;#058&011685
If a, b, and c are integers, what is the value of a ?

(1) (a - 7)(b - 7)(c - 7) = 0

(2) bc = 18

187.   18095-!-item-!-187;#058&011720
An antique dealer bought a coffee table that was then sold for a profit.   What was the selling price of the coffee table?

(1)   The dealer's cost for the coffee table was $340.

(2)   The dealer's gross profit on the coffee table was 15% of the selling price.

188.   18293-!-item-!-187;#058&011863
Is $x^4 + y^4 > z^4$?

(1) $x^2 + y^2 > z^2$

(2) x + y > z

189.   18439-!-item-!-187;#058&011934
In the xy-plane, the line k passes through the origin and through the point (a,b), where ab $\neq$ 0.   Is b positive?

(1) The slope of line k is negative.

(2) a < b

190.   18493-!-item-!-187;#058&011993
The numbers of books read by 7 students last year were 10, 5, p, q, r, 29, and 20.   What was the range of the numbers of books read by the 7 students last year?

(1) 5 < p < q

(2) p < r < 15

191.   18547-!-item-!-187;#058&011999
Is the positive integer j divisible by a greater number of different prime numbers than the positive integer k ?

(1) j is divisible by 30.

(2) k = 1,000

192.   18601-!-item-!-187;#058&012081
Is xy > 0 ?

(1) x - y > -2

(2) x - 2y < -6

193.   18701-!-item-!-187;#058&012184
If x - y > 10, is x - y > x + y ?

(1) x = 8

(2) y = -20

194.   18755-!-item-!-187;#058&012205
If r is the remainder when the positive integer n is divided by 7, what is the value of r ?

(1)   When n is divided by 21, the remainder is an odd number.

(2)   When n is divided by 28, the remainder is 3.

195.   18858-!-item-!-187;#058&012264
If w, x, y, and z are integers such that $\frac{w}{x}$ and $\frac{y}{z}$ are integers, is $\frac{w}{x} + \frac{y}{z}$ odd?

(1) wx + yz is odd.

(2) wz + xy is odd.

196.   18962-!-item-!-187;#058&012363
A recent lunch meeting at a certain club was attended by members and guests.   Each member paid $4 for the lunch, and each guest paid $8 for the lunch.   How many of the people attending the meeting were members?

(1)   A total of 20 people attended the meeting.

(2)   A total of $92 was paid for the lunch.

197.   19016-!-item-!-187;#058&012397
The integers m and p are such that 2 < m < p and m is not a factor of p.   If r is the remainder when p is divided by m, is r > 1 ?

(1)   The greatest common factor of m and p is 2.

(2)   The least common multiple of m and p is 30.

198.   19116-!-item-!-187;#058&012496
If @ denotes one of the four arithmetic operations addition, subtraction, multiplication and division, what is the value of 1 @ 2 ?

(1) n @ 0 = n for all integers n.

(2) n @ n = 0 for all integers n.

199.   19170-!-item-!-187;#058&012498

25

Warehouse W's revenue from the sale of sofas was what percent greater this year than it was last year?

(1)   Warehouse W sold 10 percent more sofas this year than it did last year.

(2)   Warehouse W's selling price per sofa was $30 greater this year than it was last year.

200.   19224-!-item-!-187;#058&012506
If d is a positive integer and f is the product of the first 30 positive integers, what is the value of d ?

(1) 10^d is a factor of f.

(2) d > 6

201.   19278-!-item-!-187;#058&012507
If k is a line in the xy-plane, what is the slope of k ?

(1)   The x-intercept of k is 2.

(2)   The y-intercept of k is 3.

202.   19378-!-item-!-187;#058&012570
The numbers x and y are <u>not</u> integers.   The value of x is closest to which integer?

(1)   4 is the integer that is closest to x + y.

(2)   1 is the integer that is closest to x - y.

203.   19527-!-item-!-187;#058&012646
What is the result when x is rounded to the nearest hundredth?

(1)   When x is rounded to the nearest thousandth the result is 0.455.

(2)   The thousandths digit of x is 5.

204.   19581-!-item-!-187;#058&012650
If Mary always takes the same route to work, how long did it take Mary to get to work on Friday?

(1)   It took Mary 20 minutes to get to work on Thursday.

(2)   Mary's average speed on her trip to work was 25 percent greater on Thursday than it was on Friday.

205.   19960-!-item-!-187;#058&012914
What was a certain company's revenue last year?

(1)   Last year the company's gross profit was $4,100.

(2)   Last year the company's revenue was 50 percent greater than its expenses.

206.   20297-!-item-!-187;#058&013111
In 1984 a certain union had a total of 15,600 members.   Was the percent increase in the total number of members in the union from 1984 to 1985 greater than that from 1985 to 1986 ?

(1) From 1984 to 1985 the total number of members in the union increased by 781, and from 1985 to 1986 the total number of members in the union again increased by 781.

(2) In 1985 the union had a total of 16,381 members, and in 1986 the union had a total of 17,162 members.

207.   20351-!-item-!-187;#058&013123
At a certain theater, the cost of each adult's ticket is $5 and the cost of each child's ticket is $2.   What was the average (arithmetic mean) cost of all the adults' and children's tickets sold at the theater yesterday?

(1) Yesterday the ratio of the number of children's tickets sold at the theater to the number of adults' tickets sold at the

theater was 3 to 2.

(2) Yesterday 80 adults' tickets were sold at the theater.

208.   20405-!-item-!-187;#058&013127
At a certain store, each notepad costs x dollars and each marker costs y dollars.   If $10 is enough to buy 5 notepads and 3 markers, is $10 enough to buy 4 notepads and 4 markers instead?

(1)   Each notepad costs less than $1.

(2) $10 is enough to buy 11 notepads.

209.   20459-!-item-!-187;#058&013172
The cost of each adult's ticket for a certain concert was $30, and the cost of each child's ticket for the concert was $24. If Hannah purchased tickets for this concert, what was the average (arithmetic mean) cost per ticket?

(1)   Hannah purchased twice as many children's tickets as adults' tickets.

(2)   Hannah purchased 4 children's tickets.

210.   20513-!-item-!-187;#058&013256
For each order, a mail-order bookseller charges a fixed processing fee and an additional shipping fee for each book in the order.   Rajeev placed five different orders with this bookseller--an order for 1 book in January, an order for 2 books in February, an order for 3 books in March, an order for 4 books in April, and an order for 5 books in May.   What was the total of Rajeev's processing and shipping fees for these five orders?

(1)   Rajeev's processing and shipping fees were $1.00 more for his order in March than for his order in January.

(2)   The total of Rajeev's shipping fees for the five orders was $7.50.

211.   20614-!-item-!-187;#058&013294
A certain economics class consists of 50 women and 30 men. How many of the men in the class are business majors?

(1)   40 percent of the women in the class are business majors.

(2)   50 percent of all the people in the class are business majors.

212.   20668-!-item-!-187;#058&013295
For a certain play performance, adults' tickets were sold for $12 each and children's tickets were sold for $8 each.   How many children's tickets were sold for the performance?

(1)   The total revenue from the sale of adults' and children's tickets for the performance was $5,040.

(2)   The number of adults' tickets sold for the performance was $\frac{1}{3}$ the total number of adults' and children's tickets sold for the performance.

213.   20722-!-item-!-187;#058&013303
Linda, Robert, and Pat packed a certain number of boxes with books. What is the ratio of the number of boxes of books that Robert packed to the number of boxes of books that Pat packed?

(1)   Linda packed 30 percent of the total number of boxes of books.

(2)   Robert packed 10 more boxes of books than Pat did.

214.   20776-!-item-!-187;#058&013419
Is the measure of one of the interior angles of quadrilateral ABCD equal to 60 degrees?

(1)   Two of the interior angles of ABCD are right angles.

(2)   The degree measure of angle ABC is twice the degree measure of angle BCD.

215.   20830-!-item-!-187;#058&013425
On the number line, the distance between point A and point C is 5 and the distance between point B and point C is 20.
Does point C lie between point A and point B ?

(1)   The distance between point A and point B is 25.

(2)   Point A lies to the left of point B.

216.   20930-!-item-!-187;#058&013466
Is the three-digit number n less than 550 ?

(1)   The product of the digits in n is 30.

(2)   The sum of the digits in n is 10.

217.   20984-!-item-!-187;#058&013473
If n is a three-digit positive integer, what is the sum of the digits of n ?

(1)   The hundreds digit of n is 3 times the units digit.

(2)   The hundreds digit of n is 3 more than the tens digit.

218.   21130-!-item-!-187;#058&013592
The retail price of a certain refrigerator is 1.6 times its wholesale price.   What is the difference between the retail price and the wholesale price of the refrigerator?

(1)   The wholesale price of the refrigerator is $200.

(2)   The retail price of the refrigerator is $320.

Practice Test 2 Data Sufficiency Keys:

1. D 2. E 3. A 4. C 5. C 6. D 7. B 8. C 9. C 10. C 11. B 12. A 13. C 14. C 15. D 16. D 17. B 18. D 19. C 20. D
21. B 22. C 23. B 24. D 25. C 26. C 27. E 28. D 29. A 30. D 31. B 32. A 33. D 34. C 35. E 36. E 37. C 38. E 39. C 40. C
41. A 42. D 43. E 44. C 45. D 46. E 47. E 48. C 49. D 50. C 51. B 52. E 53. A 54. D 55. A 56. E 57. C 58. C 59. A 60. B
61. C 62. B 63. C 64. D 65. C 66. B 67. A 68. D 69. E 70. D 71. D 72. C 73. A 74. E 75. C 76. C 77. C 78. C 79. B 80. B
81. E 82. C 83. B 84. E 85. C 86. E 87. C 88. B 89. A 90. C 91. C 92. E 93. D 94. D 95. A 96. D 97. E 98. E 99. C 100. E
101. D 102. E 103. C 104. E 105. E 106. C 107. D 108. A 109. B 110. E 111. D 112. D 113. E 114. E 115. C
116. D 117. A 118. E 119. C 120. D 121. B 122. C 123. C 124. C 125. A 126. A 127. C 128. D 129. A 130. A
131. B 132. E 133. A 134. B 135. C 136. E 137. C 138. D 139. B 140. B 141. C 142. C 143. E 144. C 145. D
146. B 147. E 148. C 149. A 150. D 151. D 152. A 153. A 154. D 155. E 156. D 157. D 158. B 159. B 160. A
161. C 162. A 163. B 164. D 165. A 166. B 167. C 168. B 169. C 170. E 171. B 172. B 173. E 174. D 175. E
176. C 177. E 178. D 179. D 180. E 181. C 182. E 183. A 184. B 185. C 186. C 187. C 188. E 189. C 190. E
191. C 192. C 193. D 194. B 195. B 196. C 197. A 198. B 199. E 200. C 201. C 202. E 203. C 204. C 205. C
206. D 207. A 208. E 209. A 210. E 211. C 212. C 213. E 214. E 215. A 216. C 217. E 218. D