

GRE Quantitative Practice Test 3

Question 1

The total number of recording titles distributed by music distributors L and M is 9,300. The number of recording titles distributed by L is 7,100, and the number of recording titles distributed by M is 5,200. Which of the following statements must be true?

Indicate all such statements.

- ☐ A More than half of the titles distributed by L are also distributed by M .
- ☐ B More than half of the titles distributed by M are also distributed by L .
- ☐ C No titles are distributed by both L and M .

Question 2

If c and d are positive integers and m is the greatest common factor of c and d , then m must be the greatest common factor of c and which of the following integers?

- ☐ A $c + d$
- ☐ B $2 + d$
- ☐ C cd
- ☐ D $2d$
- ☐ E d^2

Question 3

The average (arithmetic mean) of the 11 numbers in a list is 14. If the average of 9 of the numbers in the list is 9, what is the average of the other 2 numbers?

—	.	.	.	.	.	.	.
	0	0	0	0	0	0	0
	1	1	1	1	1	1	1
	2	2	2	2	2	2	2
	3	3	3	3	3	3	3
	4	4	4	4	4	4	4
	5	5	5	5	5	5	5
	6	6	6	6	6	6	6
	7	7	7	7	7	7	7
	8	8	8	8	8	8	8
	9	9	9	9	9	9	9

Question 4

Of the 750 participants in a professional meeting, 450 are females and $\frac{1}{2}$ of the female and $\frac{1}{4}$ of the male participants are less than thirty years old. If one of the participants will be randomly selected to receive a book prize, what is the probability that the person selected will be less than thirty years old?

(A) $\frac{1}{8}$

(B) $\frac{1}{3}$

(C) $\frac{3}{8}$

(D) $\frac{2}{5}$

(E) $\frac{3}{4}$

Question 5

In the xy -plane, what is the slope of the line whose equation is $3x - 2y = 8$?

(A) -4

(B) $-\frac{8}{3}$

(C) $\frac{2}{3}$

(D) $\frac{3}{2}$

(E) 2

Question 6

x is a positive integer and y is a negative integer.

Quantity A

$$x - y$$

Quantity B

$$y - x$$

- (A) Quantity A is greater.
 - (B) Quantity B is greater.
 - (C) The two quantities are equal.
 - (D) The relationship cannot be determined from the information given.
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The probability that events E and F will both occur is 0.42.

Question 7

Quantity A

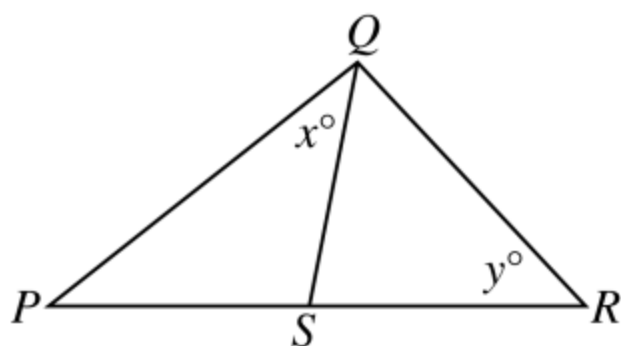
The probability that event E will occur

Quantity B

0.58

- (A) Quantity A is greater.
- (B) Quantity B is greater.
- (C) The two quantities are equal.
- (D) The relationship cannot be determined from the information given.

Question 8



$$PS = SR$$

Quantity A

x

Quantity B

y

- (A) Quantity A is greater.
- (B) Quantity B is greater.
- (C) The two quantities are equal.
- (D) The relationship cannot be determined from the information given.

Question 9

a and b are positive integers.

Quantity A

$$\frac{a}{b}$$

Quantity B

$$\frac{a+3}{b+3}$$

- (A) Quantity A is greater.
 - (B) Quantity B is greater.
 - (C) The two quantities are equal.
 - (D) The relationship cannot be determined from the information given.
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The arithmetic mean of 100 measurements is 23, and the arithmetic mean of 50 additional measurements is 27.

Question 10

Quantity A

The arithmetic mean of
the 150 measurements

Quantity B

25

- (A) Quantity A is greater.
- (B) Quantity B is greater.
- (C) The two quantities are equal.
- (D) The relationship cannot be determined from the information given.