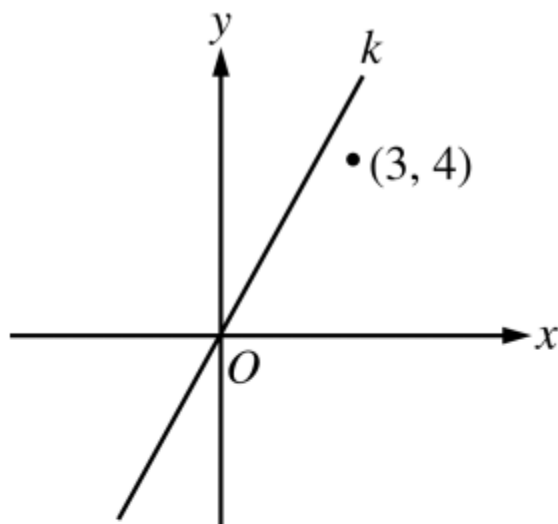


GRE Quantitative Practice Test 4

Question 1



Quantity A

Quantity B

The slope of line k

1

- (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 2

One of the roots of the equation $x^2 + kx - 6 = 0$ is 3, and k is a constant.

Quantity A

Quantity B

The value of k

-1

- (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 3

The original price of a suit was 30 percent less than the suit's \$250 suggested retail price. The price at which the suit was sold was 20 percent less than the original price.

Quantity A

Quantity B

The price at which
the suit was sold

50% of the suit's
suggested retail price

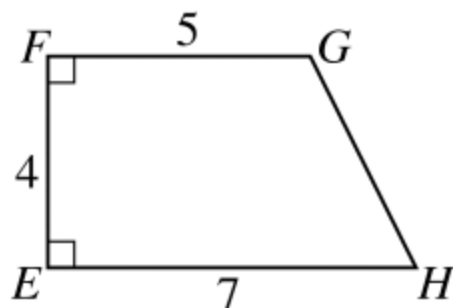
- (A) Quantity A is greater.
- (B) Quantity B is greater.
- (C) The two quantities are equal.
- (D) The relationship cannot be determined from the information given.

Question 4



Quantity A

The area of rectangular region $ABCD$



Quantity B

The area of trapezoidal region $EFGH$

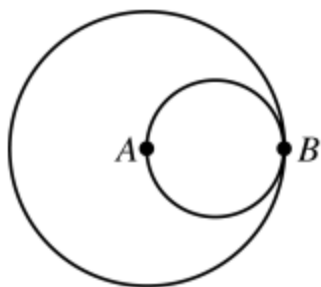
- (A) Quantity A is greater.
- (B) Quantity B is greater.
- (C) The two quantities are equal.
- (D) The relationship cannot be determined from the information given.

Question 5

If j and k are integers and $j - k$ is even, which of the following must be even?

- (A) k
- (B) jk
- (C) $j + 2k$
- (D) $jk + j$
- (E) $jk - 2j$

Question 6



The circles shown are tangent at point B . Point A is the center of the larger circle, and line segment AB (not shown) is a diameter of the smaller circle. The area of the smaller circle is what fraction of the area of the larger circle?

				/			
–	0	0	0		0	0	0
	1	1	1		1	1	1
	2	2	2		2	2	2
	3	3	3		3	3	3
	4	4	4		4	4	4
	5	5	5		5	5	5
	6	6	6		6	6	6
	7	7	7		7	7	7
	8	8	8		8	8	8
	9	9	9		9	9	9

Question 7

Last year Kate spent between $\frac{1}{4}$ and $\frac{1}{3}$ of her gross income on her mortgage payments. If Kate spent \$13,470 on her mortgage payments last year, which of the following could have been her gross income last year?

Indicate all possible values.

- ☐ A \$40,200
- ☐ B \$43,350
- ☐ C \$47,256
- ☐ D \$51,996
- ☐ E \$53,808

Question 8

If p is a negative number and $0 < s < |p|$, which of the following must also be a negative number?

- ☐ A $(p + s)^2$
- ☐ B $(p - s)^2$
- ☐ C $(s - p)^2$
- ☐ D $p^2 - s^2$
- ☐ E $s^2 - p^2$

Question 9

If $\frac{1}{2^k} + \frac{1}{2^k} = \frac{1}{2^x}$, then x expressed in terms of k is

- ☐ A $\frac{k}{2}$
- ☐ B $k - 1$
- ☐ C $k + 1$
- ☐ D $2k$
- ☐ E k^2

Question 10

The figure shows a normal distribution with mean m and standard deviation d , including approximate percents of the distribution in each of the six regions shown.

For a population of 800,000 subway riders, the numbers of subway trips taken per rider last January are approximately normally distributed with a mean of 56 trips and a standard deviation of 13 trips. Approximately how many of the riders took between 30 and 43 trips last January?

- ☐ (A) 60,000
- ☐ (B) 110,000
- ☐ (C) 160,000
- ☐ (D) 210,000
- ☐ (E) 270,000