



# Practice Test 1

# SECTION 1: ISSUE TOPIC

Directions:

You will be given a brief quotation that states or implies an issue of general interest and specific instructions on how to respond to that issue. You will have 30 minutes to plan and compose a response in which you develop a position on the issue according to the specific instructions. A response to any other issue will receive a score of zero.

“Governments are justified in circumventing civil laws when doing so is vital to the protection of national security.”

Write an essay in which you take a position on the statement above. In developing and supporting your position, you should consider ways in which the statement might or might not hold true.

## SECTION 2: ARGUMENT TOPIC

Directions:

You will be given a short passage that presents an argument, or an argument to be completed, and specific instructions on how to respond to that passage. You will have 30 minutes to plan and compose a response in which you analyze the passage according to the specific instructions. A response to any other argument will receive a score of zero.

Note that you are NOT being asked to present your own views on the subject. Make sure that you respond to the specific instructions and support your analysis with relevant reasons and/or examples.

The following is from a recent email from the Diord Corp. Human Resources Manager: “Tobor Technologies found that mental health problems and mental illness were responsible for about 15 percent of employee sick days. Tobor amended its employee insurance plan so that workers receive the same coverage for mental illness as they do for physical illness. In addition, the company hired an on-site psychologist and created a system that allows workers to schedule confidential counseling appointments. After one year, the number of sick days used by employees declined by 10 percent. Diord Corp. has had an increase in employee sick days over the past two years, so we should introduce a similar insurance plan and counseling program. These measures will surely reduce employee absenteeism and cause an increase in productivity.”

Write a response in which you examine the argument’s unstated assumptions, making sure to explain how the argument depends on the assumptions and what the implications are if the assumptions prove unwarranted.

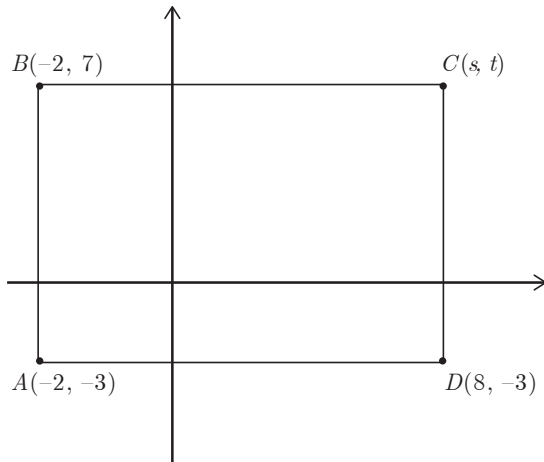
# SECTION 3: QUANTITATIVE REASONING

For each of Questions 1 to 7, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the four answer choices below each question and fill in the circle to the left of that answer choice.

- (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.

A symbol that appears more than once in a question has the same meaning throughout the question.

1 of 20



$AB$  is parallel to  $CD$ .

$BC$  is parallel to  $AD$ .

**Quantity A**

$s$

**Quantity B**

$t$

- (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.

2 of 20

A certain punch is created by mixing two parts soda and three parts ice cream. The soda is 4 parts sugar, 5 parts citric acid, and 11 parts other ingredients. The ice cream is 3 parts sugar, 2 parts citric acid, and 15 parts other ingredients.

**Quantity A**

Parts sugar in the punch

**Quantity B**

Parts citric acid in the punch

- (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.

3 of 20

The average (arithmetic mean) high temperature for  $x$  days is 70 degrees. The addition of one day with a high temperature of 75 degrees increases the average to 71 degrees.

**Quantity A**

$x$

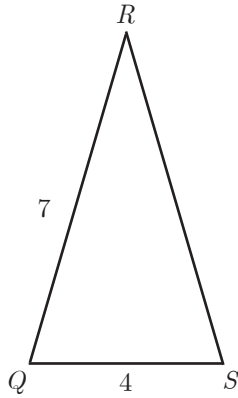
**Quantity B**

5

- (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.

# SECTION 3: QUANTITATIVE REASONING

4 of 20



Each angle in  $\triangle QRS$  has a degree measurement of either  $x$  or  $y$  and  $2x + y = 180$ .

**Quantity A**

Perimeter of  $QRS$

**Quantity B**

17

- (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.

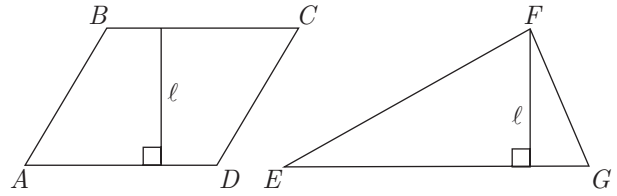
5 of 20

Set A consists of the elements  $\{1,3,5,7\}$ . If Set B consists of the elements  $\{12,14,16,x\}$ , and the standard deviation of Set B is higher than that of Set A, then which of the following is a possible value of  $x$ ?

Indicate all such values.

- A 15
- B 16
- C 17
- D 18
- E 19
- F 20

6 of 20



$AB$  is parallel to  $CD$ .

$AD$  is parallel to  $BC$ .

$$2AD = EG$$

**Quantity A**

The area of  $ABCD$

**Quantity B**

The area of  $EFG$

- (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.

7 of 20

$$(3x - 4y)(3x + 4y) = 2$$

**Quantity A**

$$9x^2 - 16y^2$$

**Quantity B**

$$4$$

- (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.

8 of 20

If  $8a - 2 = 22$ , then  $4a - 1 =$

- (A) 2
- (B)  $\frac{11}{4}$
- (C) 11
- (D) 12
- (E) 44

# SECTION 3: QUANTITATIVE REASONING

9 of 20

Twenty percent of the sweaters in a store are white. Of the remaining sweaters, 40 percent are brown, and the rest are blue. If there are 200 sweaters in the store, then how many more blue sweaters than white sweaters are in the store?

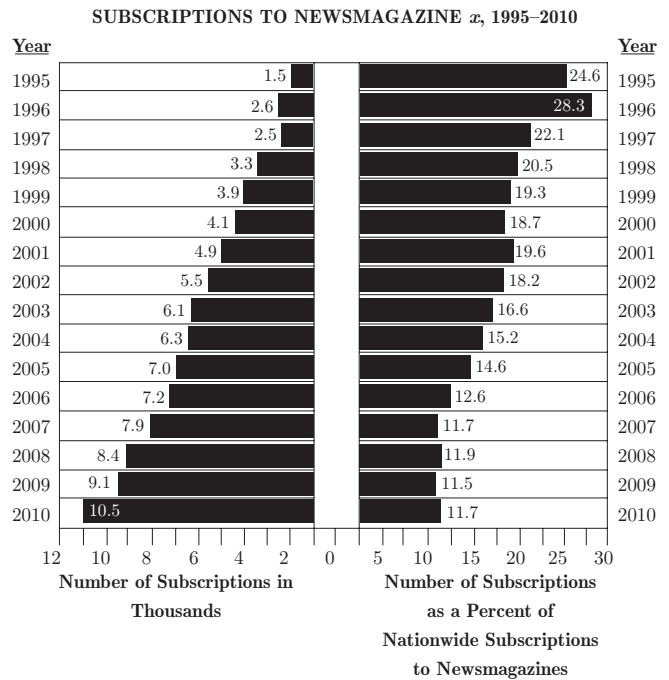
Click on the answer box and type in a number.  
Backspace to erase.

10 of 20

$$\frac{4^{13} - 4^{12}}{4^{11}} =$$

- (A) 0
- (B) 1
- (C) 4
- (D) 12
- (E) 16

Questions 11 through 14 refer to the following graph.



**NATIONWIDE NEWSMAGAZINE SUBSCRIPTIONS:  
1997 TO 2009**

Newsmagazine	1997	2000	2003	2006	2009
<i>x</i>	2,500	4,100	6,100	7,200	9,100
<i>y</i>	1,700	3,100	4,600	5,700	7,200
<i>z</i>	3,600	5,800	7,600	9,400	11,400
Others	3,500	8,900	18,500	34,700	51,300

11 of 20

The total number of nationwide newsmagazine subscriptions in 1995 is approximately what percent less than that of the total number of nationwide newsmagazine subscriptions in 2010 ?

- (A) 93%
- (B) 94%
- (C) 95%
- (D) 96%
- (E) 97%

## SECTION 3: QUANTITATIVE REASONING

12 of 20

In which of the following years did subscriptions to Newsmagazine  $z$  account for approximately  $\frac{1}{6}$  of the total nationwide magazine subscriptions?

- (A) 2009
- (B) 2006
- (C) 2003
- (D) 2000
- (E) 1997

13 of 20

What was the approximate percent increase in nationwide subscriptions to newsmagazines between 1995 and 1996 ?

- (A) 4%
- (B) 11%
- (C) 26%
- (D) 50%
- (E) 73%

14 of 20

In 1998, what was the approximate number of subscriptions to newsmagazines nationwide?

- (A) 3,000
- (B) 13,000
- (C) 16,000
- (D) 20,000
- (E) 67,000

15 of 20

If  $a = (27)(3^2)$  and  $x = (6)(3^{-1})$ , then which of the following is equivalent to  $(12)(3^{-x}) \times (15)(2^{-a})$  ?

- (A)  $5(-2245)(320)$
- (B)  $\frac{2}{5}$
- (C)  $\frac{5}{2}$
- (D)  $5(24)(38)$
- (E)  $5(2245)(320)$

16 of 20

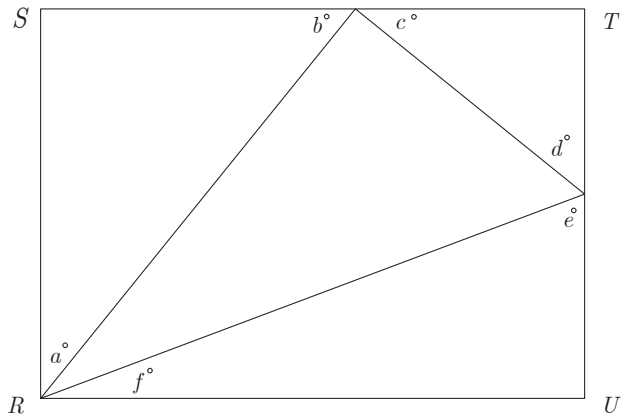
Jill has received 8 of her 12 evaluation scores. So far, Jill's average (arithmetic mean) is 3.75 out of a possible 5. If Jill needs an average of 4.0 points to get a promotion, which list of scores qualifies Jill to receive her promotion?

Indicate all such lists.

- (A) 3.0, 3.5, 4.75, 4.75
- (B) 3.5, 4.75, 4.75, 5.0
- (C) 3.25, 4.5, 4.75, 5.0
- (D) 3.75, 4.5, 4.75, 5.0

## SECTION 3: QUANTITATIVE REASONING

17 of 20



In the figure above, if  $RSTU$  is a rectangle, what is the value of  $a + b + c + d + e + f$ ?

Click on the answer box and type in a number.  
Backspace to erase.

18 of 20

If the probability of selecting, without replacement, 2 red marbles from a bag containing only red and blue marbles is  $\frac{3}{55}$  and there are 3 red marbles in the bag, what is the total number of marbles in the bag?

- (A) 10
- (B) 11
- (C) 55
- (D) 110
- (E) 165

19 of 20

All first-year students at Blue State University must take calculus, English composition, or both. If half of the 2,400 first-year students at Blue State University take calculus and half do not, and one-third of those who take calculus also take English composition, how many students take English composition?

- (A) 400
- (B) 800
- (C) 1,200
- (D) 1,600
- (E) 2,000

20 of 20

If  $\frac{13!}{2^x}$  is an integer, which of the following represents all possible values of  $x$ ?

- (A)  $0 \leq x \leq 10$
- (B)  $0 < x < 9$
- (C)  $0 \leq x < 10$
- (D)  $1 \leq x \leq 10$
- (E)  $1 < x < 10$



# SECTION 4: VERBAL REASONING

○  $1 < x < 10$

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

The professor is a noteworthy intellect, and as a teacher she shows more (i) \_\_\_\_\_ than her colleagues, whose teaching skills are (ii) \_\_\_\_\_.

Blank (i)	Blank (ii)
(A) prowess	(D) spurious
(B) profligacy	(E) maladroit
(C) orthodoxies	(F) eclectic

2 of 20

It would be (i) \_\_\_\_\_ for our leaders, given their responsibilities as democratically elected officials, to neglect to do everything they could to (ii) \_\_\_\_\_ an entirely (iii) \_\_\_\_\_ problem.

Blank (i)	Blank (ii)	Blank (iii)
(A) irresponsible	(D) forestall	(G) benign
(B) necessary	(E) sustain	(H) unimportant
(C) frivolous	(F) cultivate	(I) avoidable

3 of 20

Despite her mentor's advice that she attempt to sound consistently \_\_\_\_\_, the graduate student often resorted to using slang when presenting significant parts of her thesis, her habitual speech patterns overriding her years of learning.

(A) lucid
(B) didactic
(C) panegyrical
(D) erudite
(E) rational

4 of 20

Although she felt Steve (i) \_\_\_\_\_ the subtlety of the delicious stew recipe with his addition of the sweet potato, she thought the pungent onion (ii) \_\_\_\_\_ the otherwise (iii) \_\_\_\_\_ taste combination.

Blank (i)	Blank (ii)	Blank (iii)
(A) depleted	(D) exaggerated	(G) delicate
(B) permeated	(E) overwhelmed	(H) zesty
(C) augmented	(F) satiated	(I) detestable

## SECTION 4: VERBAL REASONING

5 of 20

At first, a still-life painting can appear quite (i) \_\_\_\_\_, its focus on such everyday objects as flowers or fruits apparently uninspired. In the hands of (ii) \_\_\_\_\_ painter, however, careful attention to slight shifts of color and texture can lead to a truly (iii) \_\_\_\_\_ and exemplary painting.

**Blank (i)**

(A) vital
(B) luxuriant
(C) banal

**Blank (ii)**

(D) a gauche
(E) an adept
(F) an ascetic

**Blank (iii)**

(G) unstinting
(H) sublime
(I) prosaic

6 of 20

The leaders of Ukraine's "Orange Revolution" were a study in contrasts. At the center of the political storm stood Viktor Yushchenko, his once (i) \_\_\_\_\_ face transformed into a monstrous mask by dioxin poisoning; but, at his side, no one could miss the (ii) \_\_\_\_\_ Yulia Tymoshenko, soon to become the world's only prime minister to adorn the covers of fashion magazines.

**Blank (i)**

(A) quiescent
(B) fatuous
(C) comely

**Blank (ii)**

(D) prepossessing
(E) decorous
(F) felicitous

## SECTION 4: VERBAL REASONING

For each of Questions 7 to 11, select one answer choice unless otherwise instructed.

Questions 7 through 9 are based on the following reading passage.

Ellen Scott has examined films dating back to the first moving pictures over a century ago to explore historical depictions of African Americans in cinema. Her multidisciplinary work links these portrayals to contemporaneous political movements and the struggle for racial justice. As Scott observes, early films—all of which, of course, postdated the Civil War but often revisited that prior century in their subject matter—frequently juxtaposed grim cruelty with entertainment. Scott remarks that during the period of time in which motion pictures came into existence and subsequently saw an explosion of interest in the industry, states reacted by passing censorship laws that forced film studios to tailor their offerings to what was deemed appropriate by local censorship boards.

One particularly influential aspect in the historical portrayals Scott has studied is the role of the South; early- and mid-twentieth century filmmakers avoided depictions of romantic relationships between people of different races, as such interactions were either illegal or not tolerated in the region. Historical films at the time also tended to downplay the harrowing realities of slavery, preferring the term “servant” to “slave,” and largely excluding tales of rebellion on the part of enslaved people. She illustrates the competing political values behind differing filmmaking factions: even while such sanitized nineteenth-century portrayals prevailed, there were attempts by progressive entities to provide more accurate, abolition-focused narratives.

7 of 20

Which of the following, if true, would provide the most support for Scott’s explanation of the highlighted portion of the passage?

- Ⓐ Films whose stories took place before the Civil War were some of the most popular at the time.
- Ⓑ Records from film studios indicate that many filmmakers were incentivized to make controversial films.
- Ⓒ Many early films no longer exist, so researchers have to rely on descriptions of them.
- Ⓓ Movies that accurately portrayed slavery’s brutality were often banned in the South.
- Ⓔ Most screenwriters had only a high school education and therefore lacked knowledge of history.

8 of 20

The passage implies that some of the earliest motion pictures contained

- Ⓐ realistic depictions of slavery
- Ⓑ elements that viewers may have found distasteful
- Ⓒ content exclusively designed to entertain
- Ⓓ only storylines that were accepted by Southerners
- Ⓔ romances between people of different races

9 of 20

It can be inferred from the passage that Scott’s research

- Ⓐ draws from multiple branches of knowledge
- Ⓑ has focused more on historical films than on other types of films
- Ⓒ has been used to promote racial equality in the film industry
- Ⓓ is controversial in the South
- Ⓔ has not included films from the twenty-first century

## SECTION 4: VERBAL REASONING

Questions 10 through 11 are based on the following reading passage.

Among the more interesting elements of etymology is the attempt to derive the meaning of seemingly nonsensical expressions. Take, for instance, the increasingly archaic rural phrase “to buy a pig in a poke.” For centuries, the expression has been used to signify the purchase of an item without full knowledge of its condition. It relates to the common Renaissance practice of securing suckling pigs for transport to market in a poke, or drawstring bag. Unscrupulous sellers would sometimes attempt to dupe purchasers by replacing the suckling pig with a cat, considered worthless at market. An unsuspecting or naïve buyer might fail to confirm the bag’s contents; a more **urbane** buyer, though, would be sure to check and—should the seller be dishonest—“let the cat out of the bag.”

10 of 20

Consider each of the choices separately and select all that apply.

Which of the following phrases from the passage would help the reader infer the meaning of the word **urbane** as used in context?

- A “increasingly archaic rural phrase”
- B “without full knowledge”
- C “unsuspecting or naïve buyer”

11 of 20

Select the sentence in which the author provides a definition for an antiquated term that may be unfamiliar to the reader.

For questions 12 through 15, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

12 of 20

Although she was such a bad-mannered child that she was sent to a boarding school, as an adult she is the very model of \_\_\_\_\_ .

- A friendliness
- B diffidence
- C propriety
- D reticence
- E decorum
- F brashness

13 of 20

Politicians sometimes appear to act in a manner that is almost \_\_\_\_\_ ; however, when all the information is released after the fact, it is apparent that they were acting according to a deliberate plan.

- A pithy
- B conventional
- C conformist
- D whimsical
- E flawless
- F capricious

## SECTION 4: VERBAL REASONING

14 of 20

Forced to take an alternate road when a massive oil spill closed the highway, the two-hour detour made their already arduous trip even more \_\_\_\_\_.

- A irksome
- B onerous
- C facile
- D glib
- E implacable
- F immutable

15 of 20

Though many of her contemporaries found her odd, Ella Wilkins is now much admired for her \_\_\_\_\_ spirit, especially her willingness to reject prevailing feminine roles and to travel to foreign lands alone.

- A forlorn
- B magnanimous
- C adventurous
- D bellicose
- E desolate
- F doughty

*For each of Questions 16 to 20, select one answer choice unless otherwise instructed.*

16 of 20

Microfiber synthetics have been taking the place of natural fibers in an ever-increasing number of clothes because they provide the same durability and deplete fewer natural resources. A shirt made of microfiber synthetics is, however, three times as expensive to produce as a natural-fiber shirt. It follows that the substitution of microfiber synthetic clothes for natural-fiber clothes is, at this time, not recommended from a financial standpoint.

Which of the following statements, if true, most seriously weakens the argument?

- A A microfiber synthetic shirt costs one-half the price of a natural-fiber shirt to maintain.
- B The production of microfiber synthetic clothes necessitates garment factories to renovate obsolete machinery and to hire extra workers to operate the new machines.
- C The upkeep of natural-fiber shirts is far less expensive than the upkeep of any other natural-fiber garment in current production.
- D While producers anticipate that the cost of microfiber synthetics will remain stable, they recognize that the advent of recycling programs for natural fibers should bring down the costs of natural fibers.
- E The cost of providing stain guards for microfiber synthetic shirts would probably be greater than what garment producers now spend on stain guards for natural-fiber shirts.

## SECTION 4: VERBAL REASONING

Questions 17 through 18 are based on the following reading passage.

Scholars of early Buddhist art agree that Buddha images in human form emerged around the first century A.D. in the regions of Mathura, located in central India, and Gandhara, now part of Pakistan and Afghanistan. Uncertainty exists, however, about whether Mathura or Gandhara has the stronger claim to primacy. Those who believe that anthropomorphic sculptures of the Buddha first appeared in Gandhara point out that earlier Buddhist art was largely aniconic, and that *bas relief* was far more common than sculpture. They argue that Greek influence in Gandhara promoted the development of the new style and form of representation of the divine. Other scholars make the case for indigenous development of such representations in Mathura, citing a centuries-long record of iconic art in pre-Buddhist traditions. They do not reject all foreign influence, but they argue that local traditions provided a strong foundation for the development of Buddhist sculpture.

Art historians bolster their arguments by highlighting distinctive features of the sculptures from each region. For example, the artists of Gandhara sculpted their Buddhas in heavy, pleated drapery, similar to that of Greek statues. Wavy lines indicating hair also reflect Greek influence. Mathura Buddhas, on the other hand, are portrayed wearing lighter robes draped in a monastic style, often with part of the shoulder and chest left bare. Elongated earlobes and strong facial features characterize Mathura images of the Buddha, whereas Gandhara images possess more angular features. Sorting out dates and directions of influence has proven difficult, but the totality of evidence suggests that the Buddha image evolved simultaneously in both regions and was shaped by the predominant cultural influences in each region.

17 of 20

Which of the following, if true, would those who believe that anthropomorphic images of Buddha originated in Gandhara be likely to cite as evidence for their viewpoint?

- (A) Pre-Buddhist subcultures in the Gandhara region created representations of their deities in human form.
- (B) Mathuran Buddhas' lightweight robes appear to have been modeled on the real robes of people who lived in a warm climate.
- (C) Gandharan artists were isolated from the larger society and not exposed to influences from outside the region.
- (D) Rulers from the Mathura region had political ties to Greek rulers and frequently exchanged gifts with them.
- (E) The hairstyles worn by Gandharan Buddhas are similar to those depicted on Greek pottery from the same period.

18 of 20

According to the passage, Buddhist art

- (A) first appeared in regions that are now part of India, Pakistan, and Afghanistan
- (B) experienced a period during which human representations of the Buddha were not common
- (C) characteristically portrayed figures with elongated earlobes and strong facial features
- (D) began to appear in the medium of *bas relief* as a result of Greek influence
- (E) was more influenced by foreign artworks than by indigenous artistic traditions

## SECTION 4: VERBAL REASONING

Questions 19 through 20 are based on the following reading passage.

In 1887, Eugene Dubois began his search in Sumatra for the “missing link”—the being that would fill the evolutionary gap between ape and man. He discovered a fossilized human-like thighbone and a section of skull. He confirmed that these fossils were of significant age by examining other fossils in the same area. The thighbone’s shape indicated that it belonged to a creature that walked upright. Dubois estimated the size of the creature’s skull from the skull fragment and concluded that this creature’s brain volume was between that of the higher primates and that of current humans. Although the concept of “missing link” has changed dramatically and a recent analysis showed Dubois’s fossils to be far too recent for humans to have evolved from this “missing link,” the value of his discovery and the debate it generated is unquestionable.

19 of 20

Consider each of the choices separately and select all that apply.

The passage supplies information to answer which of the following questions?

- A What was the approximate age of the fossils found by Dubois?
- B Does Dubois’s find meet current definitions of the “missing link”?
- C Do the flaws in Dubois’s conclusions invalidate his work?

20 of 20

Select a sentence in which the author reaches a conclusion.

# SECTION 5: QUANTITATIVE REASONING

For each of Questions 1 to 8, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the four answer choices below each question and fill in the circle to the left of that answer choice.

- (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.

A symbol that appears more than once in a question has the same meaning throughout the question.

1 of 20

A circle with center  $R$  has a radius of 6 and is inscribed in square  $ABCD$ .

Quantity A

Quantity B

The area of the largest triangle that can be drawn inside square  $ABCD$

The area of the circle with center  $R$

- (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.

2 of 20

$$xy \neq 0$$

$$\frac{a}{xs} = 632 \text{ and } \frac{a}{ys} = 158$$

Quantity A

Quantity B

$x$

$y$

- (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.

3 of 20

Quantity A

Quantity B

The remainder when 135 is divided by 7

The remainder when 135 is divided by 19

- (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.

4 of 20

$a$  and  $b$  are integers.

$$a^2 = b^3$$

Quantity A

Quantity B

$a$

$b$

- (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.

5 of 20

$$ab < 0$$

$$bc > 0$$

Quantity A

Quantity B

$ac$

0

- (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.



6 of 20

$$|x| = 6$$

$$y = x + 4$$

**Quantity A**

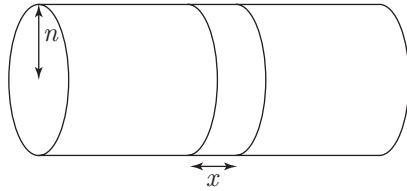
$y$

**Quantity B**

10

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

7 of 20



A rectangular ribbon of width  $x$  is wrapped around the circumference of a right circular cylinder of radius  $n$ , encircling the cylinder without overlap as shown in the figure above. The area of the ribbon is equal to the area of the base of the cylinder.

**Quantity A**

$x$

**Quantity B**

$n$

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

8 of 20

List A: 1, 2, 7, 8, 15, 2, 3, 5, 6, 13

$x$  is the median of the even numbers in List A.

$y$  is the median of the prime numbers in List A.

$z$  is the median of the least and greatest numbers in List A.

**Quantity A**

The median of  $2x$ ,  $y$ , and  $z$

**Quantity B**

$z$

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

9 of 20

Oil is pumped from a well at a rate of 500 gallons per hour. How many gallons of oil are pumped from the well in 3 hours and 15 minutes?

gallons

Click on the answer box and type in a number.  
Backspace to erase.

10 of 20

A certain pet store sells only dogs and cats. In March, the store sold twice as many dogs as cats. In April, the store sold twice the number of dogs that it sold in March, and three times the number of cats that it sold in March. If the total number of pets the store sold in March and April combined was 500, how many dogs did the store sell in March?

- Ⓐ 80
- Ⓑ 100
- Ⓒ 120
- Ⓓ 160
- Ⓔ 180

## SECTION 5: QUANTITATIVE REASONING

11 of 20

In the  $xy$ -plane, rectangle  $WXYZ$  has vertices at  $(-2, -1)$ ,  $(-2, y)$ ,  $(4, y)$ , and  $(4, -1)$ . If the area of  $WXYZ$  is 18, what is the length of its diagonal?

- (A)  $3\sqrt{2}$
- (B)  $3\sqrt{3}$
- (C)  $3\sqrt{5}$
- (D)  $3\sqrt{6}$
- (E)  $3\sqrt{7}$

12 of 20

How many three-digit integers can be created using only 5 distinct digits?

- (A) 10
- (B) 15
- (C) 20
- (D) 30
- (E) 60

13 of 20

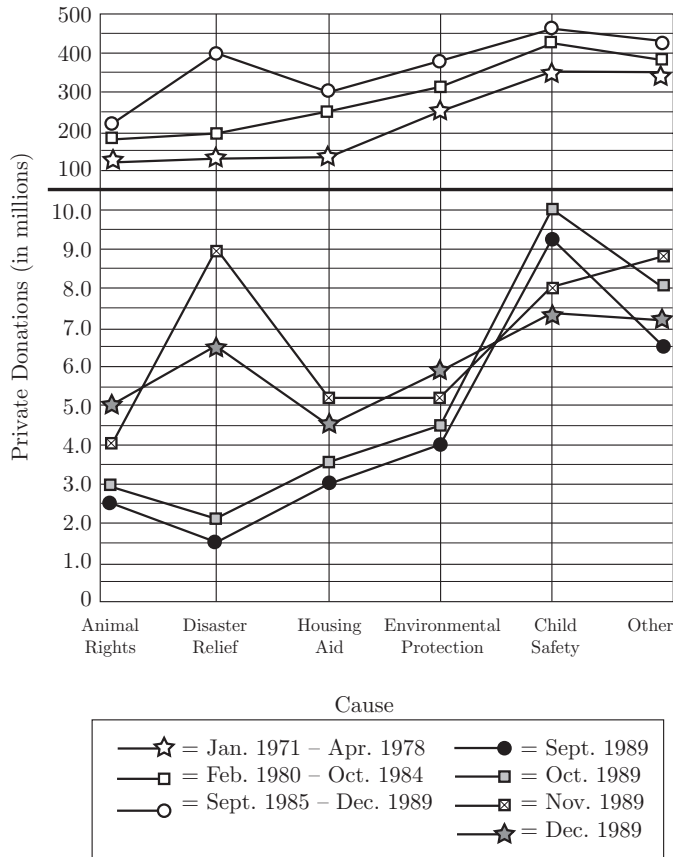
At Megalomania Industries, factory workers were paid \$20 per hour in 1990 and \$10 per hour in 2000. The CEO of Megalomania Industries was paid \$5 million in 1990 and \$50 million in 2000. The percent increase in the pay of Megalomania's CEO from 1990 to 2000 was what percent greater than the percent decrease in the hourly pay of Megalomania's factory workers over the same period?

- (A) 850%
- (B) 900%
- (C) 950%
- (D) 1,700%
- (E) 1,900%

# SECTION 5: QUANTITATIVE REASONING

Questions 14 through 16 refer to the following graph.

PRIVATE DONATIONS TO CHARITABLE CAUSES IN COUNTRY X JAN. 1971–DEC. 1989



14 of 20

If there were 38 child safety organizations and the funds contributed to these organizations in September 1989 were evenly distributed, how much did each charity receive?

- (A) \$12,000,000
- (B) \$9,400,000
- (C) \$2,500,000
- (D) \$250,000
- (E) \$38,000

15 of 20

From September 1985 to December 1989, what was the approximate ratio of private donations for housing aid to private donations for animal rights?

- (A) 20 : 9
- (B) 3 : 2
- (C) 4 : 3
- (D) 5 : 4
- (E) 6 : 5

16 of 20

Which of the following charitable causes received the least percent increase in private donations from September 1989 to October 1989 ?

- (A) Animal Rights
- (B) Disaster Relief
- (C) Housing Aid
- (D) Environmental Protection
- (E) Child Safety

# SECTION 5: QUANTITATIVE REASONING

17 of 20

In the repeating decimal  $0.0653906539\dots$ , the 34th digit to the right of the decimal point is

- (A) 9
- (B) 6
- (C) 5
- (D) 3
- (E) 0

18 of 20

If  $3x + 2y = 24$ , and  $\frac{7y}{2x} = 7$ , then  $y =$

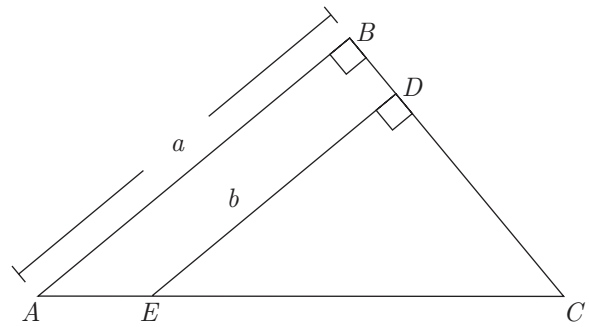

Click on each box and type in a number.  
Backspace to erase.

19 of 20

If the average (arithmetic mean) of 6, 8, 10, and  $x$  is between 6 and 12, what is the greatest possible integer value of  $x$ ?

- (A) 8
- (B) 11
- (C) 23
- (D) 28
- (E) 44

20 of 20



If  $AB = BC$ , which of the following is an expression for the area of quadrilateral  $ABDE$ ?

- (A)  $\frac{a^2}{2} - \frac{b^2}{2}$
- (B)  $\frac{a^2}{2} + \frac{b^2}{2}$
- (C)  $a^2 - b^2$
- (D)  $\frac{a^2}{4} - \frac{ab}{2}$
- (E)  $\frac{a^2}{4} + \frac{ab}{2}$

# SECTION 6: VERBAL REASONING

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

Many fashions that were considered daring in their time have been so widely worn and imitated that the (i) \_\_\_\_\_ style is no longer seen as (ii) \_\_\_\_\_.

Blank (i)	Blank (ii)
(A) proposed	(D) outlandish
(B) original	(E) commonplace
(C) revealing	(F) copied

2 of 20

Western culture has so influenced Middle Eastern music that even the latter's roles of composer and performer, at one time inseparable, have now begun to \_\_\_\_\_.

(A) divulge
(B) retreat
(C) retrench
(D) diverge
(E) fuse

3 of 20

Kazan was quickly (i) \_\_\_\_\_ by many of his contemporaries for his transgression, who saw his testimony as treachery, an act of (ii) \_\_\_\_\_ that stained how they viewed him both as an artist and as a man. It was only by continually making films that he was able to (iii) \_\_\_\_\_ his perceived sins and achieve some measure of atonement.

Blank (i)	Blank (ii)	Blank (iii)
(A) rebuked	(D) perfidy	(G) exacerbate
(B) lauded	(E) sophistry	(H) deviate
(C) mitigated	(F) redemption	(I) expiate

4 of 20

Although tranquilizers usually have a \_\_\_\_\_ effect, this is not always the case, especially when the abuse of these drugs results in a failure to induce the much-desired sleep.

(A) soporific
(B) sedulous
(C) coruscating
(D) debilitating
(E) penetrating

5 of 20

As a rule, (i) \_\_\_\_\_ interpretations of events are rejected by modern scientists in their attempts to find secular insights into the matrix of causes and effects in our modern world. Paradoxically, this fact does not (ii) \_\_\_\_\_ the existence of individual scientists who possess views that may be (iii) \_\_\_\_\_ with a belief in supernatural causes.

Blank (i)	Blank (ii)	Blank (iii)
(A) falsifiable	(D) countenance	(G) at variance
(B) preternatural	(E) enhance	(H) consonant
(C) teleological	(F) preclude	(I) discrepant

6 of 20

The Johnsons were not known for their (i) \_\_\_\_\_; at the very least, none of the family members was fearful of (ii) \_\_\_\_\_, of appearing or acting differently from other people.

Blank (i)	Blank (ii)
(A) candor	(D) pettiness
(B) vulgarity	(E) eccentricity
(C) conformity	(F) complaisance

## SECTION 6: VERBAL REASONING

For each of Questions 7 to 12, select one answer choice unless otherwise instructed.

Questions 7 through 10 are based on the following reading passage.

According to most scientists, the universe began approximately 10 to 15 billion years ago and has been expanding ever since. This theory, known as the Big Bang theory, is the fairly direct result of Hubble's law, which states that objects farther away from Earth are receding faster than those closer. This expansion implies a singular point which all matter is expanding from.

Complicating the scientific explanation is that the Big Bang cannot be thought of as an explosion from some identifiable source—rather, space and time were created in the Big Bang. Furthermore, the relationship between distance and speed is not precisely linear. So, if one were to think of galaxies as particles created in a big bang, these galaxies have both a local component of motion, as well as playing a role in the overall expansion of the universe.

A further complication is that galactic distances are so great that galactic motion, even if the galaxies are moving at incredible speeds, is difficult to observe. Scientists must therefore rely on a “standard candle,” an object of known brightness within the galaxy they wish to observe. Using the inverse square law, scientists can then measure how far that galaxy is away from our own. For instance, suppose a supernova in galaxy A appears one hundred times as bright as one in galaxy B. By the inverse square law, galaxy B is ten times farther away than galaxy A, assuming, of course, that distance is the only factor affecting brightness.

7 of 20

It can be inferred from the sentence highlighted in the passage that a standard candle is useful to scientists for which of the following reasons?

- (A) Standard candles do not have their own locus of motion.
- (B) Standard candles more reliably adhere to the law of inverse squares than do other supernovas.
- (C) Only standard candles provide a known measure of brightness.
- (D) Knowledge of an object's brightness allows scientists to measure the speed at which the object is moving toward Earth.
- (E) Knowledge of an object's brightness allows scientists to accurately measure its distance from Earth.

8 of 20

Consider each of the choices separately and select all that apply.

According to the passage, if two astronomical objects of differing distances from Earth were observed, which of the following would be true of the object closer to Earth?

- (A) It would not be as bright as the object farther from Earth.
- (B) It would be younger than the object farther from Earth.
- (C) It would be traveling away from the Earth more slowly than the farther object.

9 of 20

It can be inferred from the passage that a standard candle may not provide an accurate measure of distance if

- (A) the galaxy being measured is moving too quickly
- (B) interstellar dust makes the object measured appear dimmer than it really is
- (C) the galaxy being measured has a local component of measurement
- (D) the particles being measured do not completely accord with a linear motion
- (E) the galaxies being measured move at different speeds

10 of 20

According to the passage, if two supernovas are observed and one of those supernovas is brighter than the other, scientists can conclude that

- (A) the brighter supernova is moving closer to our galaxy at a higher speed
- (B) the precise location of the supernova is measurable
- (C) the brighter supernova may be closer to our own galaxy
- (D) the brighter supernova is farther away from Earth by a distance that is roughly inversely proportional to the dim supernova
- (E) the distance between the supernovas and our own galaxy is inversely proportional

## SECTION 6: VERBAL REASONING

Questions 11 through 12 are based on the following reading passage.

Throughout the twentieth century, it was accepted as fact that cells in our brains, called neurons, do not regenerate. Research by neurologist Elizabeth Gould overturned this core doctrine within the span of a few years. Her experiments on rats showed that even after suffering severe trauma, their brains were able to heal themselves by regenerating neurons. Gould's findings have incited a flood of new research into applications that may take advantage of neurogenesis.

One such study examines the role of reduced neurogenesis among individuals suffering from depression. It is speculated that neurogenesis may contribute to an explanation for the so called "Prozac lag." As an antidepressant, the immediate boost of serotonin caused by Prozac should have had instantaneous mood elevating effects. However, patients suffering from depression only begin to experience mood elevation weeks after beginning treatment. The study speculates that during this period, the brain may be regenerating neurons.

11 of 20

The author mentions the "Prozac lag" primarily in order to

- Ⓐ raise a possible objection to a newly proposed theory
- Ⓑ present a situation for which a new theory may serve an explanatory role
- Ⓒ offer evidence that runs counter to a previously held belief
- Ⓓ suggest a counterexample that undermines a newly proposed theory
- Ⓔ provide supporting evidence that a newly discovered phenomenon may have unforeseen effects

12 of 20

In the second paragraph, select the sentence in which the author describes an unexpected observation.

## SECTION 6: VERBAL REASONING

For questions 13 through 16, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

13 of 20

Plato, an important philosopher, is primarily known because he wrote down Socrates's \_\_\_\_\_ conversations. It is through Plato's record of these dialogues that Socrates's teachings have survived and continue to enlighten seekers of wisdom.

- A inspiring
- B edifying
- C tedious
- D grating
- E rousing
- F didactic

14 of 20

Even the colossal meal failed to \_\_\_\_\_ her voracious appetite.

- A cadge
- B exacerbate
- C provoke
- D satiate
- E mendicate
- F allay

15 of 20

Slicks of oil on a rain-soaked street are \_\_\_\_\_ and beautiful, but the lovely rainbows they produce on the asphalt can seem rather ugly when one reflects upon the road hazards they create and the environmental damage they entail.

- A anodyne
- B iridescent
- C monocoque
- D pavonine
- E parietal
- F saturnine

16 of 20

He had not always been so callous, but with time he became \_\_\_\_\_ to the violence around him.

- A adorned
- B cauterized
- C sensitized
- D ostracized
- E inured
- F attuned



## SECTION 6: VERBAL REASONING

For each of Questions 17 to 20, select one answer choice unless otherwise instructed.

17 of 20

When the maker of Megapower, a vitamin supplement, modified its formula two years ago, Tasmania, an island off the coast of New Zealand, suffered a decrease in its export earnings. Tasmania's only export, kiwi fruit, constitutes a substantial portion of the world supply of that fruit. Researchers concluded that the old Megapower formula contained natural kiwi extract, but the new formula does not.

Which of the following, if true, gives the strongest support for the researchers' claim?

- (A) Some South American countries have begun to grow kiwi fruit successfully.
- (B) United States chemists have started development of a synthetic kiwi extract.
- (C) The manufacturers of Megapower chose not to renew their contract with the Tasmanian kiwi growers.
- (D) Imports of kiwi fruit have fallen in the country where Megapower is manufactured.
- (E) There was a marked drop in sales of a number of formerly profitable items that used kiwi as an ingredient.

Questions 18 through 20 are based on the following reading passage.

While art historians do not necessarily agree on the date of the birth of modern art, they do agree that mid-nineteenth century French art shows a clear and distinct break from tradition. Pressed to point to a single picture that represents the vanguard of the modern art movement, art historians will often point to Courbet's *The Painter's Studio*.

The peculiar subtitle of Courbet's work, "Real allegory summing up a seven-year period of my life" confirms that Courbet was striving to do something strikingly original with his work. The argument has been made that the painting struck a blow for the independence of the artist, and that since Courbet's work, artists have felt freed from the societal demands placed upon their work. Paintings prior to Courbet's time were most often focused on depicting events from the Bible, history, or literature. With his singular painting, Courbet **promulgated** the idea that an artist is capable of representing only that which he can experience through his senses of sight and touch; the true artist will then be compelled to make his representation as simply and directly as possible.

18 of 20

Which of the following would most effectively replace the word **promulgated** as it is used in the context of the passage?

- (A) Displayed
- (B) Disseminated
- (C) Proclaimed
- (D) Concealed
- (E) Secreted

## SECTION 6: VERBAL REASONING

19 of 20

Select the sentence in the passage that best explains the effect of Courbet's work on other artists.

20 of 20

The effect that Courbet had on painting is most analogous to which situation?

- Ⓐ An avant-garde writer who subverts novelistic conventions
- Ⓑ A machinist who tinkers and improves his invention
- Ⓒ A watercolor painter who paints in the same style as his peers
- Ⓓ A scientist who comes up with a unified theory of several discordant scientific ideas
- Ⓔ A tailor who makes a ball gown using several different types of fabric