

Claim: In any situation, the best way to persuade other people is to present them with facts and statistics rather than with emotional arguments.

Reason: Facts are objective, so they are more persuasive than subjective appeals.

Write a response in which you discuss the extent to which you agree disagree with the claim and the reason on which that claim is based.

Select one entry for the blank. Fill the blank in the way that best completes the text.

The paleontologist examined the problem afresh, believing that the accepted classification _____ the essential continuity of the specimens by making specious distinctions among them.

disproved
belied
conflated
divulged
relaxed

Select one answer choice.

For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

When the columnist wrote about controversial issues, her own position was not always (i)_____ her analysis of the arguments being put forth on either side. If she (ii)_____ the reasoning of proponents of one side, that did not mean that she rejected their position.

Blank (i)

immune to
inferable from
influenced by

Blank (ii)

avored
summarized
challenged

Select one entry from each column.

For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.



Poets in the United States usually speak with more (i)_____ for authentic experience than for the imagination. They cultivate strategies to make themselves sound (ii)_____, as if poems were eyewitness accounts and not (iii)_____.

Blank (i)

reverence
disrespect
ineloquence

Blank (ii)

visionary
matter-of-fact
uninvolved

Blank (iii)

accurate reportage
artistic creations
vivid memories

Select one entry from each column.

Questions 4 and 5 are based on this passage.

Ralph Ellison was passionately interested in the visual arts. He immersed himself in Harlem's art scene in the 1930s, even apprenticing with sculptor Richmond Barthé for a time. Yet he was wary of projects aiming to provide a visual rendering of his novel *Invisible Man*. He reluctantly allowed Franklin Library to publish two illustrated versions of the novel but found the results disappointing and repeatedly rejected proposed film versions of the book. Despite his involvement in visual arts, Ellison insisted that only language could capture the complexity of American identity. This complexity consisted of the tension arising from the collision of the United States' written ideals, as outlined in the founding documents, and the historical and contemporary experiences molding the national consciousness.

It can be inferred that the author mentions Ellison's apprenticeship with Richmond Barthé primarily in order to

- ☐ show that Ellison drew upon some aspects of the visual arts in developing his ideas for *Invisible Man*
- ☐ show that Ellison's claim for the superiority of language derived from his experience with other art forms
- ☐ establish that Ellison had experience with an art form that interested many leading figures of the 1930s Harlem arts scene
- ☐ suggest that in the 1930s the Harlem art scene provided an environment in which artists were likely to work in several media
- ☒ qualify Ellison's reservations about visual renderings of his work by showing that he was not indifferent to visual art

Select one answer choice.

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.

Because movie studios, under pressure to generate international sales, have favored big-budget pictures with fantasy plots, the representation of everyday domestic life has largely been _____ other media, such as television and literature.

- ☒ left to
- ☒ ceded to
- ☐ ascribed to
- ☐ attributed to
- ☐ substituted for
- ☐ replaced with

Select two answer choices.

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.

The _____ of native South American textiles at the time of the Spanish conquest should not be surprising: it represented the apogee of one of the world's oldest and most sophisticated weaving and dyeing traditions.

- ☒ splendor
- ☐ eccentricity
- ☐ diversity
- ☒ brilliance
- ☐ practicality
- ☐ popularity

Select two answer choices.

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.

Maintaining a tolerant attitude toward pseudoscience might be considered _____, but it could be argued that such a disposition lowers our defenses against more dangerous delusions that are based on similar confusions and fallacies.

- ☐ naïve
- ☒ benign
- ☐ broad-minded
- ☐ indulgent
- ☐ credulous
- ☒ innocuous

Select two answer choices.

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.

Dogs' intake of olfactory information is less _____ than that of humans because dogs exhale through the side slits of their nostrils, keeping a continuous flow of inhaled air in their snouts for smelling.

- ☐ strenuous
- ☐ mediated
- ☒ punctuated
- ☐ indirect
- ☐ deliberate
- ☒ intermittent

Select two answer choices.

Questions 10 to 12 are based on this passage.

Nineteenth-century historian Jacob Burckhardt's remarkable assertion that "women stood on a footing of perfect equality with men" in sixteenth-century Italy resulted from his close identification with the early humanists—a small, elite group in Renaissance Italy. Ironically, as Margaret King has shown, humanist texts actually reflect inequalities between men and women; one example is the programs of study recommended for girls. A pedagogic imperative like Leonardo Bruni's—that women should study the liberal arts as men did with the exception of rhetoric, which "lies wholly outside the province of women"—went unnoticed by Burckhardt because he shared the humanist assumption that women's province was the private sphere rather than the public sphere. The relegation of women to a "private" sphere was a complex historical phenomenon that should be analyzed in light of other social and economic changes occurring during the Renaissance. Historians desirous of understanding women's experience cannot view the period, as Burckhardt did, through the lens provided by the humanists.

It can be inferred from the passage that Leonardo Bruni most likely believed which of the following?

- ☐ The private sphere is superior to the public sphere.
- ☐ Formal education was unnecessary for women in Renaissance Italy.
- ☒ Rhetoric is useful primarily in the public sphere rather than in the private sphere.
- ☐ Women in Renaissance Italy had less desire to study rhetoric than did men.
- ☐ Most liberal arts are of little utility in the public sphere.

Select one answer choice.

Questions 10 to 12 are based on this passage.

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Which of the following is a criticism the author of the passage makes of Burckhardt's work?

- ☐ Burckhardt's discussion of women's roles overemphasizes certain social and economic factors at the expense of other factors.
- ☐ Burckhardt failed to conduct a detailed study of all of the works of Bruni.
- ☐ Burckhardt was overly influenced by nineteenth-century assumptions about women's roles.
- ☐ Burckhardt relied heavily on sixteenth-century Italian pedagogic works; thus his work was narrowly focused.
- ☒ Burckhardt overlooked important evidence because he shared an assumption contained in that evidence.

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Which of the following, if true, would cast the most serious doubt on the position taken by the author of the passage regarding Burckhardt's evaluation of historical evidence?

- ☐ Burckhardt's scholarly works focus almost exclusively on sixteenth-century European humanists.
- ☐ Burckhardt had read Bruni's pedagogic works and had admired them.
- ☐ Margaret King's work has received considerable scholarly acclaim.
- ☐ Many of Bruni's colleagues felt that women should be excluded from instruction in all of the liberal arts.
- ☐ Margaret King's evidence is based largely on Bruni's work, which was not representative of humanist texts.

Select one answer choice.

$$20 < a < b < 30$$

Quantity A

50 percent of a

Quantity B

30 percent of b

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

Select one answer choice.

A and B are right circular cylinders. The radius and the height of B are each $\frac{1}{2}$ those of A .

Quantity A

The volume of A

Quantity B

4 times the volume of B

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

Select one answer choice.



The annual net income of Company A is its annual revenue minus its annual expenses. For year X , Company A 's net income is $\frac{1}{4}$ of its expenses.

Quantity A

For year X , Company A 's net income as a fraction of its revenue

Quantity B

$\frac{1}{5}$

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

Select one answer choice.

The standard deviation of n values $x_1, x_2, x_2, \dots, x_n$ with mean \bar{x} is equal to $\sqrt{\frac{S}{n}}$, where S is the sum of the squared differences $(x_i - \bar{x})^2$ for $1 \leq i \leq n$.

Data sets K and T have the same number of values. Each value in K is either 0 or 2, and both 0 and 2 occur in K at least once. Each value in T is either 0 or 1, and both 0 and 1 occur in T at least once.

Quantity A

The standard deviation of the values in K

Quantity B

The standard deviation of the values in T

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

Select one answer choice.

The cost to rent a car from Agency B is \$4.00 a day plus \$0.15 per mile driven, and the cost to rent a car from Agency C is \$20.00 a day plus \$0.05 per mile driven. A car is to be rented for one day and driven x miles. If the cost of renting the car from Agency B will be less than the cost of renting the car from Agency C , which of the following could be the value of x ?

Indicate all such values.

- ☐ 75
- ☐ 100
- ☐ 125
- ☐ 150
- ☐ 175
- ☐ 200
- ☐ 225
- ☐ 250

Select one or more answer choices.

Questions 6– 8 are based on the following data.

**The Cost for Delivery Service *M* to Deliver a Package,
by Shipping Weight and Shipping Zone***

Shipping Weight of Package (in pounds)	Cost to Shipping Zone (in dollars)			
	Zone 1	Zone 2	Zone 3	Zone 4
0.1 – 2.0	\$3.20	\$3.20	\$3.20	\$3.20
2.1 – 4.0	\$4.80	\$4.80	\$4.80	\$4.80
4.1 – 6.0	\$6.50	\$7.00	\$7.50	\$8.00
6.1 – 8.0	\$7.00	\$8.40	\$9.80	\$11.20
8.1 – 10.0	\$8.40	\$9.00	\$10.80	\$12.60

*The shipping weight is the actual weight of the package rounded up to the nearest 0.1 pound. The shipping zone is determined by the delivery address of the package.

The total cost to deliver two separate 3.5-pound packages to an address in shipping zone 2 is how much greater than the cost to deliver one 7.0-pound package to that address?

☐ \$1.20

☐ \$2.60

☐ \$2.70

☐ \$3.50

Select one answer choice.

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**The Cost for Delivery Service *M* to Deliver a Package,
by Shipping Weight and Shipping Zone***

Shipping Weight of Package (in pounds)	Cost to Shipping Zone (in dollars)			
	Zone 1	Zone 2	Zone 3	Zone 4
0.1 – 2.0	\$3.20	\$3.20	\$3.20	\$3.20
2.1 – 4.0	\$4.80	\$4.80	\$4.80	\$4.80
4.1 – 6.0	\$6.50	\$7.00	\$7.50	\$8.00
6.1 – 8.0	\$7.00	\$8.40	\$9.80	\$11.20
8.1 – 10.0	\$8.40	\$9.00	\$10.80	\$12.60

*The shipping weight is the actual weight of the package rounded up to the nearest 0.1 pound. The shipping zone is determined by the delivery address of the package.

A certain package was delivered to an address in shipping zone 4. The shipping weight of the package was less than 10.0 pounds, and the cost per pound to deliver the package was \$2.90. According to the table, the shipping weight of the package must have been

- ☐ less than 2.0 pounds
 ☐ between 2.1 and 4.0 pounds
 ☐ between 4.1 and 6.0 pounds
 ☐ between 6.1 and 8.0 pounds
 ☐ between 8.1 and 10.0 pounds

Select one answer choice.

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by Shipping Weight and Shipping Zone***

Shipping Weight of Package (in pounds)	Cost to Shipping Zone (in dollars)			
	Zone 1	Zone 2	Zone 3	Zone 4
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2.1 – 4.0	\$4.80	\$4.80	\$4.80	\$4.80
4.1 – 6.0	\$6.50	\$7.00	\$7.50	\$8.00
6.1 – 8.0	\$7.00	\$8.40	\$9.80	\$11.20
8.1 – 10.0	\$8.40	\$9.00	\$10.80	\$12.60

*The shipping weight is the actual weight of the package rounded up to the nearest 0.1 pound. The shipping zone is determined by the delivery address of the package.

If the cost shown to deliver a 9.0-pound package to an address in shipping zone 4 includes a sales tax of 5 percent, what is the amount of the sales tax?

☐ \$0.65

☐ \$0.60

☐ \$0.55

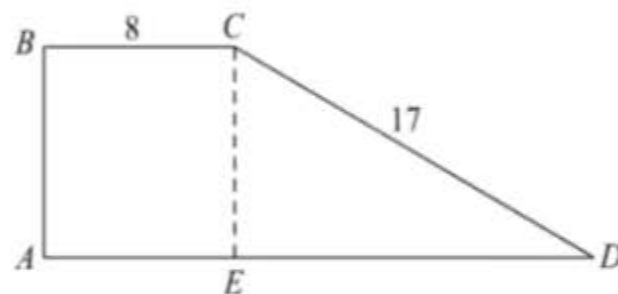
☐ \$0.50

Select one answer choice.

When the integer n is divided by 33, the remainder is 6. Which of the following must be a divisor of n ?

- ☐ 12
- ☐ 10
- ☐ 8
- ☐ 3
- ☐ 2

Select one answer choice.



In the figure, $ABCE$ is a square. What is the area of quadrilateral $ABCD$?

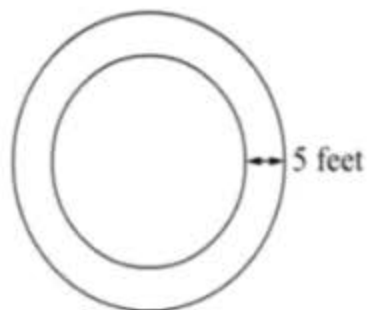
Enter your answer as an integer or a decimal in the answer box. Backspace to erase.



For how many pairs of numbers x and y does $(x - 7)^2 + (y + 3)^2 = 0$?

- ☐ None
- ☐ One only
- ☐ Two only
- ☐ Three only
- ☐ More than three

Select one answer choice.



The figure represents a 5-foot-wide circular walkway that is bounded by two concentric circles. The outer boundary of the walkway is approximately how many feet longer than the inner boundary of the walkway?

- ☐ 10
- ☐ 15
- ☐ 20
- ☐ 30
- ☐ 40

Select one answer choice.

Select one entry for the blank. Fill the blank in the way that best completes the text.

The monitoring is not _____: on the contrary, the defendant and his or her attorney are required to be given notice of the government's listening activities.

obtrusive
circumspect
surreptitious
adroit
meticulous

Select one answer choice.

Select one entry for the blank. Fill the blank in the way that best completes the text.

The effect of the film's expansive, darkly mournful opening sequence was magnified by a score that was similarly _____ and unrelenting.

iridescent
volatile
equivocal
plangent
blithe

Select one answer choice.

For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

Humans can have (i)_____ tastes: crab brains and squeezable cheese are delicacies to many people, even as others find them repulsive. The preference for sweet and abhorrence of bitter is (ii)_____, however.

Blank (i)

self-indulgent
refined
idiosyncratic

Blank (ii)

explicable
strong
universal

Select one entry from each column.

For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

Computers' triumph in chess had been engineered not by creating machines that (i)_____ human thought, as most experts in artificial intelligence had expected, but by perfecting machines that played like machines. The analogy with flight is (ii)_____: as long as people tried to fly by imitating birds, attaching wings to their arms and flapping madly, they were (iii)_____ to fail. Once engineering escaped the paradigm of the familiar, however, people were soon flying much faster than birds.

Blank (i)

aped
shelved
subverted

Blank (ii)

disingenuous
instructive
narrow

Blank (iii)

expected
likely
doomed

Select one entry from each column.

Questions 5 and 6 are based on this passage.

Since the 1970s, there has been a movement in African literary studies toward the recognition of national literatures in newly independent African states, such as Cameroon, Senegal, and Benin. But while in some of these national literatures there has undoubtedly emerged a sense of corporate identity, often marked by clear thematic and formal progressions, it remains an incontrovertible fact that the European languages in which these literatures are expressed have only an official acceptance: they are neither indigenous to the cultures on which they have been imposed, nor are they national in any real sense of the word. This must limit the claims of any of these literatures to national significance, however abundant the corpus or coherent the internal configurations.

The passage suggests that some scholars of African literary studies

- ☐ celebrate African authors for their fluency in more than one language
- ☐ believe that a literature can have national status even when it comprises a small number of works
- ☐ view thematic unity as an indispensable attribute of literatures that are justifiably defined as “national”
- ☐ claim that African countries are too culturally diverse to have national literatures
- ☐ define several African literatures as “national” even though the works are written in non-indigenous languages

Questions 5 and 6 are based on this passage.

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The author of the passage mentions “thematic and formal progressions” primarily to

- ☐ describe a structural feature unique to African national literatures
- ☐ suggest that African national literatures are very similar to each other
- ☐ cite a potential justification for a certain opinion on national literatures
- ☐ explain why many African authors avoid writing in European languages
- ☐ discuss conditions necessary for a country to possess a national literature

Questions 7 to 9 are based on this passage.

The post-1850 economic boom in the United States had its greatest impact on eastern mill towns, such as Lowell, Massachusetts. Formerly peaceful villages became bustling towns whose factories rose to dominate their skylines. Their populations sometimes tripled in a decade, forcing propertyless workers into overcrowded, dilapidated housing. Their economies came under the domination of industrialists who competed unfairly with one another and were contemptuous of the old ways. These industrialists had economic power and the social and political power that accompanied it; town politicians catered to their interests. Other property owners, especially small-business entrepreneurs and professionals, identified with them and applauded their successes. The factory workers inevitably found themselves alienated from property owners and helpless before their employers. Thus, economic class, social status, and power were inextricably intertwined; control over property and machinery was readily transformed into complete authority.

The author of the passage suggests that industrialists who had economic power in mill towns after 1850 were also very likely to

- ☐ collude with each other to increase their economic prosperity
- ☐ possess political and social power
- ☐ increase significantly the prosperity of eastern mill town residents
- ☐ find their power resisted by propertyless workers
- ☐ compete with the interests of the propertied business and professional classes

Select one answer choice.

Questions 7 to 9 are based on this passage.

The post-1850 economic boom in the United States had its greatest impact on eastern mill towns, such as Lowell, Massachusetts. Formerly peaceful villages became bustling towns whose factories rose to dominate their skylines. Their populations sometimes tripled in a decade, forcing propertyless workers into overcrowded, dilapidated housing. Their economies came under the domination of industrialists who competed unfairly with one another and were contemptuous of the old ways. These industrialists had economic power and the social and political power that accompanied it; town politicians catered to their interests. Other property owners, especially small-business entrepreneurs and professionals, identified with them and applauded their successes. The factory workers inevitably found themselves alienated from property owners and helpless before their employers. Thus, economic class, social status, and power were inextricably intertwined; control over property and machinery was readily transformed into complete authority.

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

According to the passage, which of the following is true regarding factory workers in eastern mill towns after the economic boom?

- ☐ They strongly identified with small-business entrepreneurs and professionals.
- ☐ Their numbers tripled because of the competition for their labor among various industrialists.
- ☐ They had little if any control over their own working conditions.

Questions 7 to 9 are based on this passage.

The post-1850 economic boom in the United States had its greatest impact on eastern mill towns, such as Lowell, Massachusetts. Formerly peaceful villages became bustling towns whose factories rose to **dominate** their skylines. Their populations sometimes tripled in a decade, forcing propertyless workers into overcrowded, dilapidated housing. Their economies came under the domination of industrialists who competed unfairly with one another and were contemptuous of the old ways. These industrialists had economic power and the social and political power that accompanied it; town politicians catered to their interests. Other property owners, especially small-business entrepreneurs and professionals, identified with them and applauded their successes. The factory workers inevitably found themselves alienated from property owners and helpless before their employers. Thus, economic class, social status, and power were inextricably intertwined; control over property and machinery was readily transformed into complete authority.

In the context in which it appears, “dominate” most nearly means

- ☐ dictate
- ☐ tyrannize
- ☐ control
- ☐ command
- ☐ oversee

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.

Many macroscopic or higher-level properties on the basis of which we sort chemicals into types are not _____ the chemical structure itself but instead only manifest themselves under certain conditions or in particular contexts.

- ☐ inherent in
- ☐ intrinsic to
- ☐ equivalent to
- ☐ influenced by
- ☐ affected by
- ☐ separable from

Select two answer choices.

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.

It is normal for artists who achieve great acclaim during their lifetimes to be considered _____ shortly after their deaths, only to have their reputations restored by subsequent generations.

- ☐ sacrosanct
- ☐ outmoded
- ☐ overrated
- ☐ canonical
- ☐ unfashionable
- ☐ emblematic

Select two answer choices.

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.

At public appearances the leader was remarkably taciturn, typically making _____ observations before turning the floor over to a colleague.

- ☐ trite
- ☐ insightful
- ☐ inflammatory
- ☐ shrewd
- ☐ perfunctory
- ☐ brief

Select two answer choices.

Question 13 is based on this passage.

When on an airplane, Consuelo never enjoys movies that have been widely recommended because the poor quality of the picture spoils her enjoyment. Since in no circumstances does she ever enjoy movies that have been widely derided, it follows that she never enjoys movies on airplanes.

Which of the following, if true, would enable the conclusion of the argument to be properly drawn?

- ☐ The only place where Consuelo enjoys widely recommended movies is a movie theater.
- ☐ Widely recommended movies are never shown on airplanes.
- ☐ If a movie shown on an airplane is not widely derided, then it is invariably widely recommended.
- ☐ If the picture quality of the movies shown on airplanes was better, Consuelo would enjoy the widely recommended movies.
- ☐ Some movies are neither widely recommended nor widely derided.

Select one answer choice.

Questions 14 and 15 are based on this passage.

Scientists have long debated the exact timing of the lunar cataclysm, a period approximately 4 billion years ago when Earth and the Moon were pummeled with asteroids. A clue to this puzzle may come from spherules, millimeter-sized droplets of molten rock formed after an asteroid collides explosively with a planet. Upon impact, the asteroid vaporizes both itself and the target rock, producing a vapor plume that condenses into spherules. These form a layer preserved in rock, whose age can be estimated using radiometric dating. Scientists know of fourteen of these spherule layers scattered across Earth, but none dates to the theorized lunar cataclysm time period. Four layers, however, are from between 3.47 and 3.24 billion years ago, indicating perhaps a slow decline in collisions.

The primary purpose of the passage is to

- ☐ challenge a basic assumption underlying a theory
- ☐ analyze a flaw in a novel approach to a problem
- ☐ describe different processes that could have produced the same phenomenon
- ☐ explain how a class of data might be useful for answering a question
- ☐ outline a theory that may reconcile conflicting interpretations of a phenomenon

Questions 14 and 15 are based on this passage.

Scientists have long debated the exact timing of the lunar cataclysm, a period approximately 4 billion years ago when Earth and the Moon were pummeled with asteroids. A clue to this puzzle may come from spherules, millimeter-sized droplets of molten rock formed after an asteroid collides explosively with a planet. Upon impact, the asteroid vaporizes both itself and the target rock, producing a vapor plume that condenses into spherules. These form a layer preserved in rock, whose age can be estimated using radiometric dating. Scientists know of fourteen of these spherule layers scattered across Earth, but none dates to the theorized lunar cataclysm time period. Four layers, however, are from between 3.47 and 3.24 billion years ago, indicating perhaps a slow decline in collisions.

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

Which of the following might plausibly account for the findings in the highlighted sentence?

- ☐ Spherule layers older than 3.47 billion years exist, but they have not been discovered yet.
- ☐ Spherule layers older than 3.47 billion years once existed, but they have since been destroyed.
- ☐ Fewer asteroids collided with Earth than with the Moon during the lunar cataclysm.

Select one or more answers

$$a < 0$$

Quantity A

$$-[a - (-a)]$$

Quantity B

$$0$$

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

$x < y$
 x and y are integers.

Quantity A

The number of integers between x and y , inclusive

Quantity B

$y - x + 1$

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

Select one answer choice.

A circle has an arc of length 16, which is 20 percent of the circumference of the circle.

Quantity A

The area of the circle

Quantity B

$$\frac{1,600}{\pi}$$

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

Select one answer choice.

Class	Number of Students	Median Score
<i>A</i>	18	70
<i>B</i>	24	82
<i>C</i>	20	75

A teacher has three classes that took the same test. The number of students and the median scores for each class are shown in the table.

Quantity A

The median score for the 62 students

Quantity B

75

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

Select one answer choice.



In the xy -plane, points $(-4, 0)$ and $(0, -4)$ lie on circle C .

Quantity A

The radius of circle C

Quantity B

4

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

Select one answer choice.

An object travels at a speed of 80 kilometers per hour. Which of the following is closest to this object's speed in miles per second? (1 kilometer equals 0.621 mile, rounded to the nearest thousandth.)

☐ 0.014

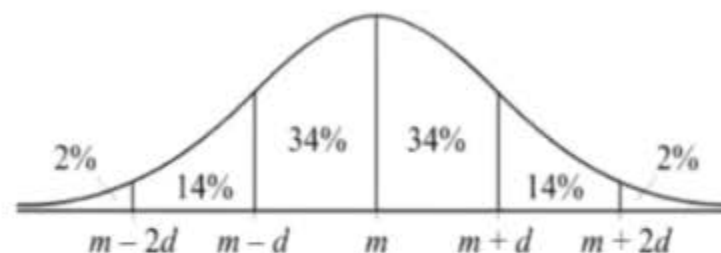
☐ 0.036

☐ 0.358

☐ 0.827

☐ 2.151

Select one answer choice.



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

The random variable W is normally distributed with mean 50 and standard deviation 9. Which of the following is closest to the value of W at the 25th percentile of the distribution?

- ☐ 13
- ☐ 17
- ☐ 32
- ☐ 44
- ☐ 48



Two identical squares with sides of length s are oriented as shown in the figure so that all the shaded triangular regions have the same area. If the sum of the areas of the shaded regions is A , what is the area of the unshaded region, in terms of s and A ?

- ☐ $s - \frac{A}{4}$
 ☐ $s - \frac{A}{2}$
 ☐ $s^2 - \frac{A}{4}$
 ☐ $s^2 - \frac{A}{2}$
 ☐ $s^2 - A$

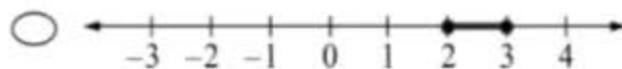
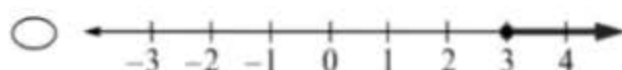
The integer p is the product of four different prime factors. If p divided by 15 is a multiple of 11, which of the following could be equal to p divided by 5?

- ☐ 45
- ☐ 55
- ☐ 66
- ☐ 121
- ☐ 132

Select one answer choice.



On the number line, which of the following represents the solution set of the inequality $x^2 - 5x + 6 \geq 0$?



Select one answer choice.



On a bookshelf, Pat arranges 7 different books: 2 history books, 3 philosophy books, and 2 science books. If Pat arranges the books so that the history books are next to each other, the science books are next to each other, and the philosophy books are next to each other, how many different arrangements are possible?

- ☐ 24
- ☐ 72
- ☐ 144
- ☐ 210
- ☐ 5,040

Select one answer choice.

At a furniture store, the original price of a chair was discounted by 30 percent. A customer purchased the chair at the discounted price and paid a sales tax of 8 percent on the discounted price. If the customer paid a total of x dollars for the chair, what was the dollar amount of the original price of the chair, in terms of x ?

☐ $0.756x$

☐ $0.780x$

☐ $1.196x$

☐ $\frac{x}{0.780}$

☐ $\frac{x}{0.756}$

Select one answer choice.

The function f is defined by $f(x) = 3x + 1$ for all numbers x . If $f(a) = a$, what is the value of a ?

Give your answer as a fraction.

Enter your answer as a fraction, with the numerator and denominator in their respective answer boxes. Backspace to erase.



The sales tax on clothing items in Country A is 25 percent of the purchase price of the item, and the sales tax on clothing items in Country B is 20 percent of the purchase price of the item. If the two countries have the same currency and if the price of a certain clothing item is the same in both countries, what percent greater is the amount of sales tax on the clothing item purchased in Country A than the amount of sales tax on the clothing item purchased in Country B ?

%

Enter your answer as an integer or a decimal in the answer box. Backspace to erase.



In a certain town, 37 percent of the households own one or more dogs, and 30 percent of the households own one or more cats. If more than 50 percent of the households own neither dogs nor cats, which of the following could be the percent of households that own one or more dogs and one or more cats?

Indicate all such percents.

- ☐ 15%
- ☐ 17%
- ☐ 19%
- ☐ 25%

Select one or more answer choices.

Section2	1	2	3	4	5	6	7	8	9	10	11	12			
答案	B	BC	ABB	E	C	AB	AD	BF	CF	C	E	E			
Section3	1	2	3	4	5	6	7	8	9	10	11	12			
答案	A	A	C	D	ABCD	A	less than 2.0 pounds	B	D	124	B	D			
Section4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
答案	C	D	CC	ABC	E	C	B	C	C	AB	BE	EF	C	D	ABC
Section5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
答案	A	C	C	D	D	A	D	D	C	A	C	E	-1/2	25	CD