

Short Placement Tests Developed by ACT

Test Prep ASSET

Version Demo

Total Demo Questions: 23

Total Premium Questions: 237

Buy Premium PDF

<https://passqueen.com>

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, Writing Skills	72
Topic 2, Reading Skills	96
Topic 3, Numerical Skills	38
Topic 4, Elementary Algebra	3
Topic 5, Intermediate Algebra	2
Topic 6, College Algebra	26
Total	237

QUESTION NO: 1

Keep the employees happy at work and bringing in an atmosphere of fun into the work environment calls for innovative ideas that appeal to all in the organization.

- A. Keep the employees happy at work and bringing in an atmosphere of fun into
- B. To keep the employees happy at work and bringing in an atmosphere of fun into
- C. Keeps the employees happy at work and bringing in an atmosphere of fun into
- D. Keeping the employees happy at work and bringing an atmosphere of fun into the work environment
- E. Kept the employees happy at work and bringing in an atmosphere of fun into

ANSWER: D

Explanation:

Keeping the employees happy at work and bringing an atmosphere of fun into the work environment is correct because it creates a grammatically complete gerund phrase that functions as the singular subject of the sentence. The two actions, “keeping” and “bringing,” are parallel: each uses an *-ing* form and describes part of the same overall workplace objective. Because the combined gerund phrase is treated as one activity or plan, it appropriately takes the singular verb “calls.” The remainder of the sentence, “for innovative ideas that appeal to all in the organization,” explains what that activity requires.

This construction also makes the intended meaning clear: creating a positive, enjoyable workplace requires ideas that appeal broadly across the organization. Parallel phrasing is important in sentence-completion questions because coordinated actions should be presented in consistent grammatical forms. The gerund form “Keeping” establishes the phrase as a noun-like subject rather than as an incomplete command or an improperly matched verb phrase. For guidance on using parallel structure, see the [Purdue OWL overview of parallel structure](#). For additional discussion of gerunds and their noun-like role in sentences, see the [Purdue OWL guide to gerunds, participles, and infinitives](#).

QUESTION NO: 2

If $P(n-1, 3) : P(n, 3) = 1:9$, find n .

- A. 6
- B. 7
- C. 8
- D. 9
- E. 4
- F. There is no integer value of n .

ANSWER: F

Explanation:

There is no integer value of n that satisfies the stated permutation ratio. Using the standard permutation formula, $P(n, 3)$ equals $n(n-1)(n-2)$, while $P(n-1, 3)$ equals $(n-1)(n-2)(n-3)$. Therefore, the ratio $P(n-1, 3) : P(n, 3)$ simplifies to $(n-3) : n$. Setting this equal to $1 : 9$ gives $9(n-3) = n$, so $8n = 27$ and $n = 27/8$. A permutation count requires a whole-number upper value with enough objects to select and arrange three of them; $27/8$ is not an allowable value. Thus none of the supplied whole-number choices can be correct, and the appropriate conclusion is that no integer solution exists. The permutation formula and its domain are described in [OpenStax College Algebra: Counting Principles](#) and [the definition of permutations](#).

QUESTION NO: 3

Despite their many differences of temperament and of literary perspective, Emerson, Thoreau, Hawthorne, Melville, and Whitman share certain beliefs. Common to all these writers is their humanistic perspective. Its basic premises are that humans are the spiritual center of the universe and that in them alone is the clue of the nature, history and ultimately the cosmos itself. Without denying outright the existence either of a deity or of brute matter, this perspective nevertheless rejects them as exclusive principles of interpretation and prefers to explain humans and the world in terms of humanity itself. This preference is expressed most clearly in the Transcendentalist principle that the structure of the universe literally duplicates the structure of the individual self: therefore, all knowledge begins with self-knowledge.

This common perspective is almost always universalized. Its emphasis is not upon the individual as a particular European or American, but upon the human as universal, freed from the accidents of time, space, birth and talent. Thus, for Emerson, the “American Scholar” turns out to be simply “Main Tinking”; while, for Whitman, the “Song of Myself” merges imperceptibly into a song of all the “children of Adam;” where “every atom belonging to me as good belongs to you.” Also common to all five writers is the belief that individual virtue and happiness depends upon the self-realization, which, in turn, depend upon the harmonious reconciliation of two universal psychological tendencies: first, the self-asserting impulse of the individual to withdraw; to remain unique and separate, and to be responsible only to himself or herself, and second, the self-transcending impulse of the individual to embrace the whole world in the experience of a single moment and to know and become one with that world. These conflicting impulses can be seen in the democratic ethic. Democracy advocates individualism, the preservation of the individual’s freedom and self-expression. But the democratic self is torn between the duty to self, which is implied by the concept of liberty, and the duty to society, which is implied by the concept of equality and fraternity.

A third assumption common to the five writers is that intuition and imagination offer a surer road to truth than does abstract logic or scientific method. It is illustrated by their emphasis upon the introspection—their belief that the clue to external nature is to be found in the inner world of individual psychology and by their interpretation of experience as, in essence, symbolic. Both these stresses presume an organic relationship between the self and the cosmos of which only intuition and imagination can properly take account. These writers’ faith in the imagination and in themselves as practitioners of imagination led them to conceive of the writer as a seer and enabled them to achieve supreme confidence in their own moral and metaphysical insights.

According to the passage, the five writers object to the scientific method primarily because they think it

- A. is not the best way to obtain an understanding of the relationship between the individual and the cosmos
- B. is so specialized that it leads to an understanding of separate parts of the universe but not of the relationships among those parts
- C. cannot provide an adequate explanation of intuition and imagination
- D. misleads people into believing they have an understanding of truth, when they do not
- E. prevents people from recognizing the symbolic nature of experience.

ANSWER: A

Explanation:

The correct answer is *is not the best way to obtain an understanding of the relationship between the individual and the cosmos*. The passage explicitly states that the writers regard “intuition and imagination” as a more reliable route to truth than “abstract logic or scientific method.” It then identifies the central object of their inquiry: the organic relationship between the individual self and the cosmos. Their reliance on introspection reflects the belief that external nature can be understood through the inner world of human psychology, while their symbolic reading of experience assumes a deep correspondence between self and universe. Because this relationship is presented as organic and spiritual rather than merely observable or measurable, the writers believe that intuition and imagination are the faculties capable of grasping it fully. Thus, the scientific method is not rejected as universally useless; rather, it is considered less suitable for understanding the self–cosmos connection that is fundamental to their humanistic and Transcendentalist outlook. This answer follows the passage’s stated comparison between scientific method and the imaginative, intuitive approach favored by these writers. For broader context on ACT reading skills, see [ACT’s Reading Test description](#) and [ACT ASSET information](#).

QUESTION NO: 4

Out of 10 toppers of a school, 5 are girls and 5 are boys. 5 students have to be chosen to represent the school in a seminar. Find the probability that all five are girls.

- A. 3/50
- B. 1/28
- C. 1/10
- D. 1/5
- E. 1/252

ANSWER: E

Explanation:

The correct probability is **1/252**. Because the school is choosing a group of five students and the order in which students are selected does not matter, the outcomes are counted with combinations. The total number of possible groups is the number of ways to select five students from all ten toppers: $C(10, 5) = 10!/(5!5!) = 252$. For the selected group to consist entirely of girls, it must contain each of the five girls. There is exactly one such group, calculated as $C(5, 5) = 1$. Therefore, the probability is the number of favorable groups divided by the total number of equally likely groups: 1/252. Equivalently, if students were selected one at a time without replacement, the probability would be $(5/10) \times (4/9) \times (3/8) \times (2/7) \times (1/6)$, which also simplifies to 1/252. This uses the standard probability principle that, when outcomes are equally likely, probability equals favorable outcomes divided by total outcomes. For further review of combinations and their use in counting selections, see [OpenStax: Combinations and the Binomial Theorem](#) and [Encyclopaedia Britannica: Probability Theory](#).

QUESTION NO: 5

In recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself the opportunity to choosing an appropriate reaction other than an anger outburst.

- A. In recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself
- B. on recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself
- C. for recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself
- D. by recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself
- E. with recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself

ANSWER: D

Explanation:

“by recognizing the onset of mounting fury and making an honest attempt to slow down, you automatically give yourself” correctly expresses the means by which the result occurs. The preposition “by” naturally introduces an action or process that produces an outcome: a person gives themselves time and a chance to respond constructively through recognizing escalating anger and deliberately slowing down. This creates a clear, logical connection between the two actions in the introductory phrase and the main clause’s result.

The phrase also uses parallel gerund forms—“recognizing” and “making”—to describe the paired actions that serve as the method. A comma after the introductory prepositional phrase properly separates it from the independent clause, “you automatically give yourself.” This construction is consistent with standard English guidance on using prepositional phrases and gerunds to show method or means. See the [Purdue OWL overview of gerunds, participles, and infinitives](#) and the [Cambridge Dictionary grammar guidance for “by”](#).

QUESTION NO: 6

Woodrow Wilson was referring to the liberal idea of the economic market when he said that the free enterprise system is the most efficient economic system. Maximum freedom means maximum productiveness; our “openness” is to be the measure of our stability. Fascination with this ideal has made Americans defy the “Old World” categories of settled possessiveness versus unsettling deprivation., the cupidity of retention versus the cupidity of seizure, a “status quo” defended of attacked.

The United States, it was believed, had no status quo ante. Our only “station” was the turning of a stationary wheel, spinning faster and faster. We did not base our system on property but opportunity—which meant we based it not on stability but on mobility. The more things changed, that is, the more rapidly the wheel turned, the steadier we would be. The conventional picture of class politics is composed of the Haves, who want a stability to keep what they have, and HaveNots, who want a touch of instability and change in which to scramble for the things they have not. But Americans imagined a condition in which speculators, self-makers, runners are always using the new opportunities given by our land. These economic leaders (front-runners) would thus be mainly agents of Change. The nonstarters were considered the ones who wanted stability, a strong referee to give them some position in the race, a regulative hand to calm manic speculation; an authority that can call things to a half begin things again from compensatorily staggered “starting lines”. Reform in America has been sterile because it can imagine no change except through the extension of this metaphor of the race, wider inclusion of competitors, “a piece of the action.” As it were, of the disenfranchised. There is no attempt to call off the race. Since our only stability is change. America seems not to honor the quiet work that achieves social interdependence and stability. There is, in our legends, no heroism of the office clerk, no stable industrial work force of the people who actually make the system work. There is no pride in being an employee (Wilson asked for a return to the time when everyone was an employer). There has been no boasting about our social workers—they are needed; empty boasts from the past make us ashamed of our present achievements, make us try to forget or deny them, move away from them. There is no honor but in the wonderland race we must all run, all trying to win, none winning in the end (for there is no end).

According to the passage, “Old World” values were based on

- A. ability
- B. property
- C. family connections
- D. guild hierarchies
- E. education

ANSWER: B

Explanation:

property is correct because the passage explicitly contrasts the United States’ ideal of opportunity and mobility with the “Old World” view of settled possession, deprivation, and a defended or attacked status quo. In this contrast, the older social order is presented as one organized around what people already possess and their efforts either to retain it or acquire it. The author then makes the contrast unmistakable by stating that Americans believed they “did not base” their system “on property but opportunity.” Thus, property identifies the foundational value assigned to the Old World, while opportunity characterizes the distinctly American ideal described in the passage. The subsequent discussion of “Haves” seeking stability to preserve what they own also reinforces that possession and retention are central to the older, more fixed social model. In ordinary economic and legal usage, property refers to owned resources or possessions and to the rights associated with possessing them, which fits the passage’s emphasis on settled ownership and social stability. See [Encyclopaedia Britannica’s overview of property law](#) and [ACT Assessments](#) for context on ACT-style reading assessment materials.

QUESTION NO: 7

At the time Jane Austen’s novels were published – between 1811 and 1818 – English literature was not part of any academic curriculum. In addition, fiction was under strenuous attack. Certain religious and political groups felt novels had the power to make so called immoral characters so interesting young readers would identify with them; these groups also considered novels to be of little practical use. Even Coleridge, certainly no literary reactionary, spoke for many when he asserted that “novel-reading occasions the destruction of the mind’s power”.

These attitudes towards novels help explain why Austen received little attention from early nineteenth century literary critics. (In any case, a novelist published anonymously, as Austen was, would not be likely to receive much critical attention). The literary response that was accorded her, however, was often as incisive as twentieth century criticism. In his attack in 1816 on novelistic portrayals “outside of ordinary experience,” for example, Scott made an insightful remarks about the merits of Austen’s fiction. Her novels, wrote Scott, “present to the reader an accurate and exact. picture of ordinary everyday people and places, reminiscent of seventeenth –century Flemish painting.” Scott did not use the word “realistic probability in judging novels. The critic Whitely did not use the word realism either, but he expressed agreement with Scott’s evaluation, and went on to suggest the possibilities for moral instruction in what we have called Austen’s realistic method. Her characters, wrote Whitely, are persuasive agents for moral truth since they are ordinary persons “so clearly evoked that was feel an interest in their fate as if it were our own” Moral instruction, explained Whitely, is more likely to be effective when conveyed through

recognizably human and interesting characters then when imparted by a sermonizing narrator. Whately especially praised Austen's ability to create characters who "mingle goodness and villainy, weakness and virtue, as in life they are always mingled." Whately concluded his remarks by comparing Austen's art of characterization to Sicken's, stating his preference for Austen's. often anticipated the reservations of twentieth-century critics. An example of such a response was Lewes' complaint in 1859 that Austen's range of subjects and characters was too narrow. Praising her verisimilitude, Lewes added that nonetheless her focus was too often upon only the unlofty and the common place. (Twentieth-century Marxists, on the other hand, were to complain about what they saw as her exclusive emphasis on a lofty upper-middle class) in any case, having been rescued by some literary critics from neglect and indeed gradually lionized by them, Austen's steadily reached, by the mid-nineteenth century, the enviable pinnacle of being considered controversial.

The passage supplies information for answering which of the following questions?

- A. Whately aware of Scott's remarks about Jane Austen's novels?
- B. Who is an example of a twentieth-century Marxist critic?
- C. Who is an example of twentieth-century critic who admired Jane Austen's novels?
- D. What is the author's judgment of Dickens?
- E. Did Jane Austen's express her opinion of those nineteenth-century critics who admired her novels.

ANSWER: A

Explanation:

The passage supplies enough information to answer "Whately aware of Scott's remarks about Jane Austen's novels?" It identifies Scott's earlier appraisal of Austen and then states that Whately "expressed agreement with Scott's evaluation." Agreement with a particular evaluation necessarily establishes that Whately knew of, or was aware of, the evaluation attributed to Scott. Thus, the reader can answer the question affirmatively using the relationship between the two critics' views as presented in the passage. The question does not require outside biographical knowledge about either reviewer; it asks only whether the passage provides the needed information, and its explicit statement of Whately's agreement does so. The discussion also accurately reflects a major feature of early Austen criticism: reviewers valued her close depiction of ordinary social life and her convincing characterization. Austen's publication history and critical reception are summarized by [Encyclopaedia Britannica's Jane Austen biography](#). For further context on Scott as a novelist and literary critic active in Austen's period, see [Encyclopaedia Britannica's Sir Walter Scott biography](#).

QUESTION NO: 8

How many really suffer as a result of labor market problems ? This is one of the most critical yet contentious social policy questions. In many ways, our social statistics exaggerate the degree of hardship. Unemployment does not have the same dire consequences today as it did in the 1930's when most of the unemployed were primary bread-winners, when income and earnings were usually much closer to the margin of subsistence, and when there were no countervailing social programs for those failing in the labor market. Increasing affluence, the rise of families with more than one wage earner, the growing predominance of secondary earners among the unemployed, and improved social welfare protection have unquestionably mitigated the consequences of joblessness. Earnings and income data also overstate the dimensions of hardship. Among the millions with hourly earnings at or below the minimum wage level, the overwhelming majority are from multiple-earner, relatively affluent families. Most of those counted by the poverty statistics are elderly or handicapped or have family responsibilities which keep them out of the labor force, so the poverty statistics are by no means an accurate indicator of labor market pathologies.

Yet there are also many ways our social statistics underestimate the degree of labour-market-related hardship. The unemployment counts exclude the millions of fully employed workers whose wages are so low that their families remain in poverty. Low wages and repeated or prolonged unemployment frequently interact to undermine the capacity for self-support. Since the number experiencing joblessness at some time during the year is several times the number unemployed in any month, those who suffer as a result of forced idleness can equal or exceed average annual unemployment, even though only a minority of the jobless in any month really suffer. For every person counted in the month unemployment tallies, there is another working part-time because of the inability to find full-time work, or else outside the labor force but wanting a job. Finally, income transfers in our country have always focused on the elderly, disabled, and dependent, neglecting the needs of the working poor, so that the dramatic expansion of cash and in kind transfers does not necessarily mean that those failing in the labor market are adequately protected.

As a result of such contradictory evidence, it is uncertain whether those suffering seriously as a result of labor market problems number in the hundreds of thousands or the tens of millions, and hence, whether high levels of joblessness can be tolerated or must be countered by job creation and economic stimulus. There is only one area of agreement in this debate—that the existing poverty, employment, and earnings statistics are inadequate for one of their primary applications, measuring the consequences of labor market problems.

According to the passage, one factor that causes unemployment and earnings figures to overpredict the amount of economic hardship is the

- A. recurrence of periods of unemployment for a group of low-wage workers
- B. possibility that earnings may be received from more than one job per workers
- C. Fact that unemployment counts do not include those who work for low wages and remain poor
- D. Establishment of system of record-keeping that makes it possible to compile poverty statistics
- E. Prevalence, among low-wage workers and the unemployed, of members of families in which other are employed

ANSWER: E

Explanation:

The prevalence, among low-wage workers and the unemployed, of members of families in which others are employed is correct because the passage emphasizes that an individual worker's wage or job status does not necessarily measure the economic resources available to that worker's household. It states that the rise of families with more than one wage earner has mitigated the consequences of joblessness and that unemployed people are increasingly secondary earners rather than primary breadwinners. It also specifically notes that most people earning at or below the minimum wage belong to multiple-earner, relatively affluent families. Thus, counting each low-wage worker or unemployed person as though that person's earnings alone determined family hardship inflates the apparent extent of hardship. Household income can include earnings from another family member, so low individual wages or a spell of unemployment may not place the family near subsistence. This distinction reflects why labor-force and wage statistics must be interpreted alongside household and family-income measures. The U.S. Census Bureau similarly defines poverty using the resources and composition of the family or household rather than one worker's hourly wage alone; see [Census poverty-measure guidance](#). For related labor-force definitions, see the [Bureau of Labor Statistics CPS definitions](#).

QUESTION NO: 9

Meena has to eat only one fruit out of three. The probability that she eats a banana is $\frac{3}{2}$ times the probability that she eats an apple. The probability that she eats a guava is half the probability that she eats a banana. What is her probability of having an apple?

- A. $\frac{1}{4}$
- B. $\frac{4}{13}$
- C. $\frac{1}{6}$
- D. $\frac{4}{7}$
- E. $\frac{11}{36}$

ANSWER: B

Explanation:

The correct probability is $\frac{4}{13}$. Let the probability that Meena eats an apple be x . The question states that the probability of eating a banana is $\frac{3}{2}$ times the probability of eating an apple, so the banana probability is $\frac{3x}{2}$. It also states that the probability of eating a guava is half the banana probability. Therefore, the guava probability is $(\frac{1}{2}) \times (\frac{3x}{2})$, which equals $\frac{3x}{4}$.

Because Meena eats exactly one of the three fruits, these three mutually exclusive probabilities must add to 1. Thus, $x + \frac{3x}{2} + \frac{3x}{4} = 1$. Using a common denominator of 4 gives $\frac{4x}{4} + \frac{6x}{4} + \frac{3x}{4} = 1$, or $\frac{13x}{4} = 1$. Multiplying both sides by $\frac{4}{13}$

yields $x = 4/13$. Therefore, Meena's probability of having an apple is $4/13$. This uses the fundamental rule that probabilities of all mutually exclusive, exhaustive outcomes total 1; see [Khan Academy's probability library](#) and [OpenStax's basic probability rules](#).

QUESTION NO: 10

Urban heat is often discussed as if it were a uniform condition: a city is said to be several degrees warmer than its surrounding countryside. Such comparisons are useful, but they conceal important differences within the city itself. On a summer afternoon, two neighborhoods only a few blocks apart may have sharply different surface temperatures. Asphalt parking lots, dark roofs, sparse tree cover, and wide streets absorb and retain solar energy. Parks, shaded sidewalks, and vegetated yards interrupt that process. For residents, the difference is not merely statistical. It can affect the cost of cooling a home, the safety of walking to a bus stop, and the likelihood that an elderly person will suffer during a heat wave.

Until recently, many municipal heat studies relied on a small number of weather stations, commonly located at airports or other open sites. These instruments provide dependable long-term records, but they are poorly suited to reveal block-by-block variation. A citywide average may therefore describe an area that few residents actually experience. In response, several research groups have equipped volunteers with temperature sensors and asked them to travel predetermined routes by car, bicycle, or foot at the same times of day. The resulting measurements, when combined with satellite images and land-cover data, produce detailed maps of local heat patterns.

Such maps have practical value, but they can also be misread. A map showing a hot neighborhood does not by itself establish why that neighborhood is hot, nor does it prove that one particular improvement will solve the problem. A newly planted tree, for example, may eventually provide shade, but it will not immediately change the temperature of a large paved area. Moreover, decisions about where to add trees, cool roofs, or shaded transit shelters must take account of water supply, maintenance, housing density, and residents' own priorities. Heat mapping is most useful when it begins a public conversation rather than ends one.

Its greatest contribution may be to make an abstract regional problem visible at the scale of daily life. A resident who has long known that one walk home is unpleasantly exposed can see that experience represented in a broader pattern. City planners, in turn, can compare that pattern with information about age, income, health, and access to cooling. The map does not choose a policy. It does, however, make it harder to assume that all parts of a city bear heat in the same way.

The discussion of a newly planted tree serves primarily to

- A. show that trees are ineffective in reducing heat
- B. illustrate why a mapped condition does not automatically determine a remedy
- C. demonstrate that residents oppose neighborhood tree planting
- D. explain why paved areas should be removed immediately
- E. establish that satellite images cannot identify tree cover

ANSWER: B

Explanation:

The example of the newly planted tree illustrates the author's warning that a map cannot prove that one simple intervention will immediately solve a neighborhood's heat problem. Although trees may eventually provide shade, one new tree does not rapidly alter the thermal effects of a large paved area.

Thus, the example qualifies the use of heat maps without rejecting their value. For information about the cooling benefits of established vegetation, see the [EPA resource on using trees and vegetation to reduce heat islands](#).

QUESTION NO: 11

Find the number of words formed by permuting all the letters of the word INDEPENDENCE.

number of words formed by permuting all the letters of the word INDEPENDENCE.

- A. 144

- B. 1663200
- C. 136050
- D. 6432
- E. 720

ANSWER: B

Explanation:

The correct answer is **1663200**. The word *INDEPENDENCE* has 12 letters in total. If every letter were distinct, there would be $12!$ possible arrangements. However, repeated letters mean that many of those arrangements are indistinguishable. In this word, E occurs 4 times, N occurs 3 times, and D occurs 2 times; I, P, and C each occur once. To account for repetitions, divide $12!$ by the factorial of each repeated-letter count: $12!/(4! \times 3! \times 2!)$. This gives $479,001,600/(24 \times 6 \times 2) = 479,001,600/288 = 1,663,200$. Therefore, 1663200 is the number of distinct words that can be formed by using every letter of INDEPENDENCE exactly once. This is the standard multinomial-permutation method: when objects repeat, dividing by the factorials of their frequencies removes duplicate counts created by exchanging identical objects. See the explanation of permutations with repeated elements at [OpenStax College Algebra](#) and the related factorial and permutation rules at [Encyclopaedia Britannica](#).

QUESTION NO: 12

How many five digit numbers can be formed using the digits 0, 2, 3, 4 and 5, when repetition is allowed such that the number formed is divisible by 2 and 5?

- A. 100
- B. 150
- C. 3125
- D. 500
- E. 125

ANSWER: D

Explanation:

The correct answer is **500**. A number divisible by both 2 and 5 must be divisible by their least common multiple, 10. In the decimal system, divisibility by 10 requires the final digit to be 0. Therefore, the units digit is fixed as 0.

The first digit of a five-digit number cannot be 0, since that would produce a number with fewer than five digits. It can be 2, 3, 4, or 5, giving 4 choices. Repetition is allowed, so each of the three middle positions can independently contain any of the five available digits: 0, 2, 3, 4, or 5. This gives 5 choices for each middle position.

Using the multiplication principle, the total is $4 \times 5 \times 5 \times 5 \times 1 = 500$. The final factor is 1 because the last digit must be 0. For the divisibility rule used here, see [Math Is Fun: Divisibility Rules](#). For the counting principle, see [OpenStax: Counting Principles](#).

QUESTION NO: 13

Some of the perpetrators even foulmouth the voters and asked them to leave.

- A. even foulmouth the voters and asked them to leave.
- B. even foulmouthed the voters and asked them to leave
- C. even foul mouth the voters and asked them to leave.

- D. even will foulmouth the voters and asked them to leave.
- E. even may be foulmouthed the voters and asked them to leave.

ANSWER: B

Explanation:

The correct revision is “*even foulmouthed the voters and asked them to leave*” because it maintains a consistent past-tense account of the perpetrators’ actions. The verb *foulmouth* means to use abusive, insulting, or profane language toward someone. In this sentence, the perpetrators performed two completed actions: they used abusive language toward voters and then asked those voters to leave. Therefore, both coordinated verbs should be in the simple past tense: *foulmouthed* and *asked*. The subject, “Some of the perpetrators,” is plural, but the simple past form does not change for plural subjects, so *foulmouthed* is the appropriate verb form. This revision also preserves clear parallel structure, with two past-tense verb phrases joined by *and*: “foulmouthed the voters” and “asked them to leave.” Standard dictionaries list *foulmouth* as a verb and recognize *foulmouthed* as its past-tense form. See the [Merriam-Webster entry for “foulmouth”](#) and the [Cambridge Dictionary entry for “foul-mouth”](#).

QUESTION NO: 14

Ten different letters of an alphabet are given. Words with 6 letters are formed with these alphabets. How many such words can be formed when repetition is not allowed in any word?

- A. 52040
- B. 21624
- C. 182340
- D. 151200
- E. 600000

ANSWER: D

Explanation:

The correct answer is **151200**. Because repetition is not allowed, each six-letter word is an ordered arrangement of six distinct letters selected from the ten available letters. There are 10 choices for the first position. After one letter has been used, 9 choices remain for the second position, then 8 for the third, 7 for the fourth, 6 for the fifth, and 5 for the sixth. By the multiplication principle, the total is therefore $10 \times 9 \times 8 \times 7 \times 6 \times 5 = 151,200$.

This is a permutation rather than a combination because the order of letters matters: changing the position of letters produces a different word. In permutation notation, the calculation is $10P_6$, or $10!/(10-6)!$. Cancelling the factorials leaves $10!/4! = 10 \times 9 \times 8 \times 7 \times 6 \times 5 = 151,200$. The counting approach follows the fundamental counting principle and the standard definition of permutations, as described by [OpenStax College Algebra](#) and [Encyclopaedia Britannica’s explanation of permutations](#).

QUESTION NO: 15

How many three-digit odd numbers can be formed from the digits 1, 3, 5, 0 and 8?

- A. 25
- B. 60
- C. 75
- D. 100
- E. 15

ANSWER: B

Explanation:

The correct answer is **60**. A three-digit odd number must have an odd digit in its ones place. From the available digits, there are three choices for that position: 1, 3, or 5. For each such choice, the hundreds place cannot be 0, because a three-digit number cannot begin with zero. It therefore has four possible choices: 1, 3, 5, or 8. The tens place can be any of the five listed digits, including 0. Applying the multiplication principle gives 3 choices for the ones place, multiplied by 4 choices for the hundreds place, multiplied by 5 choices for the tens place: $3 \times 4 \times 5 = 60$. This interpretation allows a listed digit to be used again in another position, as the question does not state that digits may be used only once. The multiplication principle is the standard method for counting outcomes produced through successive independent choices. See OpenStax's discussion of the counting principle at [OpenStax College Algebra](#). ACT's ASSET program is a placement-testing assessment, described at [ACT ASSET](#).

QUESTION NO: 16

Office orders are used to pass on important information such as withdrawing rights, imposing conditions, making postings or transfers, and sanctioning promotion or increment and so on.

- A.** information such as withdrawing rights, imposing conditions, making postings or transfers, and sanctioning promotion or increment and so on.
- B.** information such as withdrawing rights, imposing conditions, and making postings or transfers, sanctioning promotion or increment and so on.
- C.** information such as withdrawing rights, and imposing conditions, making postings or transfers, sanctioning promotion or increment and so on.
- D.** information such as withdrawing rights, imposing conditions, making postings or transfers, and sanctioning promotion or increment and so on.
- E.** information such as withdrawing rights, and imposing conditions, and making postings or transfers, sanctioning promotion or increment and so on.

ANSWER: D

Explanation:

The correct completion is *information such as withdrawing rights, imposing conditions, making postings or transfers, and sanctioning promotion or increment and so on*. It presents the actions conveyed through office orders as a clear, parallel series: withdrawing rights; imposing conditions; making postings or transfers; and sanctioning promotion or increment. Parallel construction helps readers recognize that each phrase has the same grammatical role and is one item in the list of examples following "such as." The comma before the final "and" also makes the final list item easy to identify, particularly because the individual items contain several words and one item includes the coordinating word "or." This organization supports accurate, efficient reading in administrative writing, where the scope of an order must be readily understood. Guidance on parallel structure and series punctuation is available from the [Purdue Online Writing Lab's Parallel Structure guidance](#) and the [Chicago Manual of Style's discussion of commas in a series](#).

QUESTION NO: 17

Most economists in the United States seem captivated by spell of the free market. Consequently, nothing seems good or normal that does not accord with the requirements of the free market.

A price that is determined by the seller or for that matter, established by anyone other than the aggregate of consumers seems pernicious, accordingly, it requires a major act of will to think of price – fixing (the determination of prices by the seller) as both "normal" and having a valuable economic function. In fact, price-fixing is normal in all industrialized societies because the industrial system itself provides, as an effortless consequence of its own development, the pricefixing that requires, Modern industrial planning requires and rewards great size. Hence a comparatively small number of large firms will be competing for the same group of consumers. That each large firm will act with consideration of its own needs and thus avoid selling its products for more than its competitors charge is commonly recognized by advocates of free-markets economic theories. But each large firms will also act with full consideration of the needs that it has in common with the other

large firms competing for the same customers. Each large firm will thus avoid significant price cutting, because price cutting would be prejudicial to the common interest in a stable demand for products. Most economists do not see price-fixing when it occurs because they expect it to be brought about by a number of explicit agreements among large firms; it is not.

More over those economists who argue that allowing the free market to operate without interference is the most efficient method of establishing prices have not considered the economies of non socialist countries other than the United States. These economies employ intentional pricefixing usually in an overt fashion. Formal price fixing by cartel and informal price fixing by agreements covering the members of an industry are common place. Were there something peculiarly efficient about the free market and inefficient about price fixing, the countries that have avoided the first and used the second would have suffered drastically in their economic development. There is no indication that they have.

Socialist industry also works within a frame work of controlled prices. In early 1970's, the Soviet Union began to give firms and industries some of the flexibility in adjusting prices that a more informal evolution has accorded the capitalist system. Economists in the United States have hailed the change as a return to the free market. But Soviet firms are no more subject to prices established by free market over which they exercise little influenced than are capitalist firms.

The passage provides information that would answer which of the following questions about pricefixing?

- I. What are some of the ways in which prices can be fixed?
 - II. For what products is price-fixing likely to be more profitable than the operation of the freemarket?
 - III. Is price-fixing more common in socialist industrialized societies or in nonsocialist industrialized societies?
- A. I only
 - B. III only
 - C. I and II only
 - D. II and III only
 - E. I, II and III
 - F. What are some of the ways in which prices can be fixed?
 - II. For what products is price-fixing likely to be more profitable than the operation of the freemarket?
 - III. Is price-fixing more common in socialist industrialized societies or in nonsocialist industrialized societies?

ANSWER: A

Explanation:

I only is correct because the passage directly identifies several mechanisms through which prices may be fixed. It defines price-fixing as price determination by a seller or by an entity other than the aggregate of consumers. It also describes a less explicit form that can arise among a small group of large competing firms: each firm avoids substantial price cuts in recognition of a shared interest in stable demand. In addition, the passage expressly names overt formal price-fixing by cartels, informal agreements among members of an industry, and controlled prices in socialist industry. These details provide clear textual information about multiple ways prices can be fixed.

The question asks what information the passage *provides*, so the appropriate approach is to match each proposed question to details stated in the text rather than infer facts the author does not supply. This is consistent with the ACT Reading section's emphasis on identifying ideas and relationships supported by a passage. See ACT's [description of the ACT Reading test](#) and its [test-preparation resources](#).

QUESTION NO: 18

When an European wanted to dance in the moon the American said he will try reach further planets.

- A. When an European wanted to dance in the moon the American said
- B. When a European wanted to dance in the moon the American said
- C. When an European wanted to dance in the moon a American said

- D. When a European wanted to dance in the moon an American said
- E. When the European wanted to dance in the moon a American said

ANSWER: D

Explanation:

“When a European wanted to dance in the moon an American said” correctly applies the indefinite articles required by the pronunciation of the following nouns. Although *European* begins with the vowel letter *e*, it begins with the consonant sound /j/ (“yoo”), as in “you.” English therefore uses *a* before it: “a European.” In contrast, *American* begins with a vowel sound, so it takes *an*: “an American.” Article choice is governed by the initial sound of the next word, rather than by whether its first written letter is a vowel or consonant. This same sound-based rule applies in comparable phrases such as “a university,” “a one-time event,” “an hour,” and “an MBA.” The sentence’s intended contrast between one European and one American therefore calls for “a European” and “an American.” For further guidance on using *a* and *an* according to pronunciation, see the [Purdue OWL article guide](#) and the [Cambridge Dictionary grammar reference](#).

QUESTION NO: 19

One and half million barrels of oil flows every day through the pipeline, which stretches across 1,263 km of harsh terrain.

- A. One and half million barrels of oil flows every
- B. One and an half million barrels of oil flows every
- C. One and the half million barrels of oil flows every
- D. One and a half million barrels of oil flows every
- E. One half million barrels of oil flows every

ANSWER: D

Explanation:

The correct phrasing is “One and a half million barrels of oil flows every” because *one and a half* is the standard English expression for the mixed number 1½. In a mixed-number construction, the article *a* belongs before the fractional noun *half*. “one and a half,” just as English uses “two and a half” or “three and a half.” Here, the entire quantity “one and a half million” functions as a numerical modifier for “barrels of oil.”

This wording communicates the intended daily volume precisely: 1,500,000 barrels. In edited prose, conventional number expressions are especially important because they prevent ambiguity and make technical or journalistic statements easy to read. The sentence’s singular verb, “flows,” is also appropriate because it treats the stated amount of oil as a single aggregate quantity moving through the pipeline, rather than focusing on individual barrels. For guidance on writing numbers and fractions in prose, see the [Merriam-Webster entry for “half”](#) and the [GrammarBook guidance on numbers](#).

QUESTION NO: 20

Before we can come to a decision, we shall need to hear all the pros and cant's of the matter.

- A. to hear all the pros and cant's of the matter.
- B. to hear all the pros to cons of the matter.
- C. to hear all the pros and cons of the matter.
- D. to hear all the pros of cons of the matter.
- E. to hear all the pros the cons of the matter.

ANSWER: C**Explanation:**

The correct wording is “to hear all the pros and cons of the matter.” The fixed expression *pros and cons* means the arguments, considerations, advantages, and disadvantages relevant to a decision. Here, the sentence says that a decision should not be made until every relevant consideration has been heard, so this idiom communicates the intended meaning precisely.

In this expression, *pros* and *cons* are parallel plural nouns joined by *and*. The word *cons* is not a contraction and does not show possession, so it does not take an apostrophe. Apostrophes are generally used for possession or to mark omitted letters in contractions, as explained by the [Purdue Online Writing Lab's apostrophe guidance](#). Major dictionaries record *pros and cons* as the established phrase for favorable and unfavorable arguments; see the [Cambridge Dictionary entry for “pros and cons”](#). Therefore, “to hear all the pros and cons of the matter” supplies both the correct idiom and the correct punctuation.

QUESTION NO: 21

How many really suffer as a result of labor market problems ? This is one of the most critical yet contentious social policy questions. In many ways, our social statistics exaggerate the degree of hardship. Unemployment does not have the same dire consequences today as it did in the 1930's when most of the unemployed were primary bread-winners, when income and earnings were usually much closer to the margin of subsistence, and when there were no countervailing social programs for those failing in the labor market. Increasing affluence, the rise of families with more than one wage earner, the growing predominance of secondary earners among the unemployed, and improved social welfare protection have unquestionably mitigated the consequences of joblessness. Earnings and income data also overstate the dimensions of hardship. Among the millions with hourly earnings at or below the minimum wage level, the overwhelming majority are from multiple-earner, relatively affluent families. Most of those counted by the poverty statistics are elderly or handicapped or have family responsibilities which keep them out of the labor force, so the poverty statistics are by no means an accurate indicator of labor market pathologies.

Yet there are also many ways our social statistics underestimate the degree of labour-marketrelated hardship. The unemployment counts exclude the millions of fully employed workers whose wages are so low that their families remain in poverty. Low wages and repeated or prolonged unemployment frequently interact to undermine the capacity for self-support. Since the number experiencing joblessness at some time during the year is several times the number unemployed in any month, those who suffer as a result of forced idleness can equal or exceed average annual unemployment, even though only a minority of the jobless in any month really suffer. For every person counted in the month unemployment tallies, there is another working part-time because of the inability to find full-time work, or else outside the labor force but wanting a job. Finally, income transfers in our country have always focused on the elderly, disabled, and dependent, neglecting the needs of the working poor, so that the dramatic expansion of cash and in kind transfers does not necessarily mean that those failing in the labor market are adequately protected.

As a result of such contradictory evidence, it is uncertain whether those suffering seriously as a result of labor market problems number in the hundreds of thousands or the tens of millions, and hence, whether high levels of joblessness can be tolerated or must be countered by job creation and economic stimulus. There is only one area of agreement in this debate—that the existing poverty, employment, and earnings statistics are inadequate for one of their primary applications, measuring the consequences of labor market problems.

The author's purpose in citing those who are repeatedly unemployed during a twelve-month period is most probably to show that

- A. there are several factors that cause the payment of low wages to some members of the labor force
- B. unemployment statistics can underestimate the hardship resulting from joblessness
- C. recurrent inadequacies in the labor market can exist and can cause hardships for individual workers.
- D. A majority of those who are jobless at any one time do not suffer severe hardship
- E. There are fewer individuals who are without jobs at some time during a year than would be expected on the basis of monthly unemployment figures

ANSWER: B

Explanation:

The correct answer is *unemployment statistics can underestimate the hardship resulting from joblessness*. The author notes that the number of people who experience unemployment at some point over an entire year is “several times” the number counted as unemployed in any single month. This comparison shows why a monthly unemployment total captures only a snapshot of joblessness. A person may be employed when the monthly count is taken but may nevertheless have endured one or more periods of involuntary unemployment during the year. Consequently, the accumulated number of people affected by forced idleness—and the hardship associated with it—may be much larger than the one-month figure suggests. The author uses repeated or prolonged unemployment as part of a broader argument that standard labor-market measures fail to fully represent the effects of joblessness on workers’ ability to support themselves. This distinction between a point-in-time measure and a measure covering a longer period is consistent with labor-force data practice: the U.S. Bureau of Labor Statistics explains that unemployment estimates are based on a monthly survey reference period, while additional measures help describe broader forms of labor underutilization. See the [BLS definitions for labor-force statistics](#) and the [BLS alternative measures of labor underutilization](#).

QUESTION NO: 22

In a highly competitive business environment of today companies spend large amounts of money on marketing to increase their customer base and sadly they do not make efforts to increase employee happiness or satisfaction.

- A. to increase their customer base and sadly they do
- B. to increase their customer base, for sadly they do
- C. to increase their customer base, but sadly they do
- D. to increase their customer base, sadly they do
- E. to increase their customer base, which sadly they do

ANSWER: C**Explanation:**

“to increase their customer base, but sadly they do” correctly joins the two complete ideas in the sentence. The first independent clause states that companies spend substantial amounts on marketing to increase their customer base. The following independent clause states that they do not make comparable efforts to improve employee happiness or satisfaction. Because these ideas contrast, the coordinating conjunction “but” expresses the intended relationship clearly and precisely.

A comma before “but” is appropriate here because “but” connects two independent clauses: “companies spend large amounts of money on marketing to increase their customer base” and “sadly they do not make efforts to increase employee happiness or satisfaction.” The adverb “sadly” adds the writer’s evaluative tone but does not alter the need for a coordinating conjunction that signals contrast. This construction creates a grammatically complete, readable sentence and preserves the intended comparison between investment in customer acquisition and neglect of employee satisfaction. For guidance on using coordinating conjunctions to join independent clauses, see the [Purdue OWL comma rules](#) and [ACT English practice resources](#).

QUESTION NO: 23

The oil is transported via a pipeline that runs north- south no Alaska to port of valdez.

- A. that runs north- south on Alaska to port
- B. that runs north- south in Alaska to port
- C. that runs north- south to Alaska to port
- D. that runs north- south into Alaska to port
- E. that runs north- south across Alaska to port

ANSWER: E

Explanation:

The correct wording is **“that runs north- south across Alaska to port”** because *across* accurately expresses movement or extension from one side of a geographic area to another. A pipeline beginning in northern Alaska and continuing southward to Valdez spans the state’s land area; therefore, it runs north–south *across Alaska*. This preposition establishes the needed geographic relationship between the pipeline’s route and Alaska as the region it traverses. The intended sentence describes the Trans-Alaska Pipeline System, which carries crude oil from Prudhoe Bay on Alaska’s North Slope to the marine terminal at Valdez, crossing the state over a long north-to-south route. The Alaska Department of Natural Resources describes this system and its route to Valdez at [Alaska DNR: Trans-Alaska Pipeline System](#). Standard English usage likewise defines *across* as movement from one side to the other, a meaning that fits a route passing through the breadth of a state; see [Merriam-Webster’s definition of “across”](#). In a polished sentence, “north–south” would ordinarily be written with an unspaced hyphen or en dash, and “Valdez” would be capitalized.