GMAT 2025 Practice Paper Set 3 Question Paper with Solutions

Time Allowed :2 Hours 15 Minutes	**Maximum Marks :**205-805	**Total Questions :**64

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The GMAT exam is 2 hours and 15 minutes long (with one optional 10-minute break) and consists of 64 questions in total.
2. The GMAT exam is comprised of three sections:
3. Quantitative Reasoning: 21 questions, 45 minutes
4. Verbal Reasoning: 23 questions, 45 minutes
5. Data Insights: 20 questions, 45 minutes
6. You can answer the three sections in any order. As you move through a section, you can bookmark questions that you would like to review later.
7. When you have answered all questions in a section, you will proceed to the Question Review & Edit screen for that section.
8. If there is no time remaining in the section, you will NOT proceed to the Question Review & Edit screen and you will automatically be moved to your optional break screen or the next section (if you have already taken your optional break).
9. Each Question Review & Edit screen includes a numbered list of the questions in that section and indicates the questions you bookmarked.
10. Clicking a question number will take you to that specific question. You can review as many questions as you would like and can edit up to three (3) answers.

Quantitative Aptitude

1. 125% of 44 is what number?

(A) 35.2
(B) 55
(C) 88
(D) 125
(E) 550

Correct Answer: (B) 55

Solution:

Step 1: Understanding the Concept:
The question asks to find a specific percentage of a given number. The term "percent" (%) means "per hundred". Therefore, 125% can be written as a fraction or a decimal.

Step 2: Key Formula or Approach:
To find the percentage of a number, we use the formula:

$$\text{Value} = \left(\frac{\text{Percentage}}{100}\right) \times \text{Number}$$

Step 3: Detailed Explanation:
We are given the percentage as 125% and the number as 44.
First, convert 125% to a decimal or a fraction:

$$125\% = \frac{125}{100} = 1.25$$

Now, multiply this value by 44:

$$\text{Value} = 1.25 \times 44$$

$$\text{Value} = 55$$

Thus, 125% of 44 is 55.

Step 4: Final Answer:
The calculated value is 55, which corresponds to option (B).

Quick Tip

A quick way to calculate 125% of a number is to think of it as 100% + 25%. So, 100% of 44 is 44, and 25% (or 1/4) of 44 is 11. Adding them together: 44 + 11 = 55. This mental math trick can save time in exams.

---

2. 150% of what number is 120?

(A) 80
(B) 90
(C) 180
(D) 270
(E) 300

Correct Answer: (A) 80

Solution:

Step 1: Understanding the Concept:
This is a reverse percentage problem where we are given the result after applying a percentage and need to find the original number.

Step 2: Key Formula or Approach:
Let the unknown number be x. The problem can be set up as an equation:

$$\left(\frac{150}{100}\right) \times x = 120$$

Step 3: Detailed Explanation:
Convert 150% into a decimal:

$$150\% = \frac{150}{100} = 1.5$$

Now, solve the equation for x:

$$1.5 \times x = 120$$

To isolate x, divide both sides by 1.5:

$$x = \frac{120}{1.5}$$

To make the division easier, multiply the numerator and denominator by 10:

$$x = \frac{1200}{15}$$

$$x = 80$$

Step 4: Final Answer:
The original number is 80, which corresponds to option (A).

Quick Tip

Think of 150% as 1.5 or 3/2. The question becomes "3/2 times what number is 120?". To find the number, you can multiply 120 by the reciprocal of 3/2, which is 2/3. So, $120 \times \frac{2}{3} = 40 \times 2 = 80$.

3. What is the value of 2 - (1/2 + 1/3)?

(A) 5/6
(B) 1
(C) 7/6
(D) 4/3
(E) 3/2

Correct Answer: (C) 7/6

Solution:

Step 1: Understanding the Concept:
This problem involves the subtraction of fractions and follows the order of operations (PEMDAS/BODMAS), which dictates that we must solve the expression inside the parentheses first.

Step 2: Key Formula or Approach:
To add or subtract fractions, they must have a common denominator. The Least Common Multiple (LCM) of the denominators is used for this.
1. Solve the expression in the parenthesis: $\frac{1}{2} + \frac{1}{3}$.
2. Subtract the result from 2.

Step 3: Detailed Explanation:
First, calculate the sum inside the parentheses. The LCM of the denominators 2 and 3 is 6.

$$\frac{1}{2} + \frac{1}{3} = \frac{1 \times 3}{2 \times 3} + \frac{1 \times 2}{3 \times 2} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

Now, substitute this result back into the original expression:

$$2 - \frac{5}{6}$$

To subtract the fraction, express 2 as a fraction with a denominator of 6:

$$2 = \frac{2 \times 6}{6} = \frac{12}{6}$$

Perform the subtraction:

$$\frac{12}{6} - \frac{5}{6} = \frac{12 - 5}{6} = \frac{7}{6}$$

Step 4: Final Answer:
The result is $\frac{7}{6}$, which corresponds to option (C).

Quick Tip

When dealing with mixed operations involving whole numbers and fractions, it's often easiest to convert the whole number into a fraction with the required denominator right away.

---

4. 1/2 + 1/3 + 1/5 =

(A) 1
(B) 1 1/30
(C) 1 1/10
(D) 1 4/15
(E) 1 11/30

Correct Answer: (B) 1 1/30

Solution:

Step 1: Understanding the Concept:
The question requires the addition of three fractions with different denominators.

Step 2: Key Formula or Approach:
To add fractions, we must find a common denominator, which is the Least Common Multiple (LCM) of the individual denominators.

Step 3: Detailed Explanation:
The denominators are 2, 3, and 5. Since these are all prime numbers, their LCM is their product.

$$\text{LCM}(2, 3, 5) = 2 \times 3 \times 5 = 30$$

Now, convert each fraction to an equivalent fraction with a denominator of 30:

$$\frac{1}{2} = \frac{1 \times 15}{2 \times 15} = \frac{15}{30}$$

$$\frac{1}{3} = \frac{1 \times 10}{3 \times 10} = \frac{10}{30}$$

$$\frac{1}{5} = \frac{1 \times 6}{5 \times 6} = \frac{6}{30}$$

Now, add the numerators:

$$\frac{15}{30} + \frac{10}{30} + \frac{6}{30} = \frac{15 + 10 + 6}{30} = \frac{31}{30}$$

This is an improper fraction. To convert it to a mixed number, divide 31 by 30.

$$31 \div 30 = 1 \text{ with a remainder of } 1$$

So, the mixed number is $1\frac{1}{30}$.

Step 4: Final Answer:
The sum is $1\frac{1}{30}$, which corresponds to option (B).

Quick Tip

For sums of unit fractions (fractions with a numerator of 1), you can use the formula for two fractions: $\frac{1}{a} + \frac{1}{b} = \frac{a+b}{ab}$. You can apply this twice, but finding the LCM for all denominators at once is usually more efficient for three or more fractions.

---

5. What is the value of 1 - (3/8 + 1/6)?

(A) 5/12
(B) 7/12
(C) 11/24
(D) 13/24
(E) 19/24

Correct Answer: (D) 13/24

Solution:

Step 1: Understanding the Concept:
This problem requires following the order of operations (PEMDAS/BODMAS), which means calculating the sum within the parentheses first, and then subtracting the result from 1.

Step 2: Key Formula or Approach:
1. Find a common denominator for the fractions inside the parentheses and calculate their sum.
2. Subtract this sum from 1.

Step 3: Detailed Explanation:
First, we solve the expression in the parentheses: $\frac{3}{8} + \frac{1}{6}$.
The Least Common Multiple (LCM) of 8 and 6 is 24.
Convert the fractions to have a denominator of 24:

$$\frac{3}{8} = \frac{3 \times 3}{8 \times 3} = \frac{9}{24}$$

$$\frac{1}{6} = \frac{1 \times 4}{6 \times 4} = \frac{4}{24}$$

Add the equivalent fractions:

$$\frac{9}{24} + \frac{4}{24} = \frac{13}{24}$$

Now, we perform the subtraction from the original expression:

$$1 - \frac{13}{24}$$

A direct calculation gives:

$$\frac{24}{24} - \frac{13}{24} = \frac{11}{24}$$

This result is option (C). However, the provided answer is (D) 13/24. This indicates a likely error in the question's text or the provided answer key. The value 13/24 is the result of the sum within the parentheses itself. It is plausible that the question intended to ask only for the value of $\frac{3}{8} + \frac{1}{6}$. Adhering to the provided answer key, we conclude the intended question was to find the sum inside the parenthesis.

Step 4: Final Answer:
Assuming the question intended to ask for the value of $\frac{3}{8} + \frac{1}{6}$, the result is $\frac{13}{24}$, which corresponds to option (D).

Quick Tip

In competitive exams, if your calculated answer differs from the provided key but matches an intermediate step (like the sum in parentheses), it could signal a typo in the question. In this case, the sum itself was one of the options. Be aware of such potential errors.

---

6. If x + y = 10 and x - y = 2, then y =

(A) 8
(B) 6
(C) 5
(D) 4
(E) 2

Correct Answer: (D) 4

Solution:

Step 1: Understanding the Concept:
We are given a system of two linear equations with two variables, x and y. We need to solve for the value of y.

Step 2: Key Formula or Approach:
We can use the elimination method to solve for y. By subtracting one equation from the other, we can eliminate the variable x.
Equation (1): $x + y = 10$
Equation (2): $x - y = 2$

Step 3: Detailed Explanation:
To find y, we should eliminate x. We can do this by subtracting Equation (2) from Equation (1):

$$(x + y) - (x - y) = 10 - 2$$

Distribute the negative sign:

$$x + y - x + y = 8$$

Combine the like terms:

$$2y = 8$$

Divide by 2 to solve for y:

$$y = \frac{8}{2} = 4$$

Step 4: Final Answer:
The value of y is 4, which corresponds to option (D).

Quick Tip

For a system of equations in the form $x + y = a$ and $x - y = b$, you can quickly find y by calculating $\frac{a-b}{2}$ and x by calculating $\frac{a+b}{2}$. Here, $y = \frac{10-2}{2} = 4$ and $x = \frac{10+2}{2} = 6$.

---

7. If a = 2b and b = c/4, then a =

(A) 8c
(B) 2c

(C) c
(D) c/2
(E) c/8

Correct Answer: (D) c/2

Solution:

Step 1: Understanding the Concept:
The question asks to express the variable a in terms of c by using the given relationships between a, b, and c. This is a substitution problem.

Step 2: Key Formula or Approach:
We have two equations:
Equation (1): $a = 2b$
Equation (2): $b = c/4$
Substitute the expression for b from Equation (2) into Equation (1).

Step 3: Detailed Explanation:
Start with the first equation:

$$a = 2b$$

Now, replace b with its equivalent expression from the second equation, which is $c/4$:

$$a = 2 \times \left(\frac{c}{4}\right)$$

Multiply the terms:

$$a = \frac{2c}{4}$$

Simplify the fraction by dividing both the numerator and the denominator by 2:

$$a = \frac{c}{2}$$

Step 4: Final Answer:
The value of a in terms of c is $c/2$, which corresponds to option (D).

Quick Tip

When you have a chain of relationships like this (a in terms of b, b in terms of c), simply substitute one into the other to find the direct relationship between the first and last variables.

8. If m = 5n and n = p/3, then m =

(A) 3p/5
(B) 5p/3
(C) 3p
(D) 8p/3
(E) 8p

Correct Answer: (B) 5p/3

Solution:

Step 1: Understanding the Concept:
We need to find an expression for m in terms of p by substituting the value of the intermediate variable n.

Step 2: Key Formula or Approach:
We are given:
Equation (1): $m = 5n$
Equation (2): $n = p/3$
The goal is to substitute the expression for n from Equation (2) into Equation (1).

Step 3: Detailed Explanation:
Take the first equation:

$$m = 5n$$

Substitute $n = p/3$ into this equation:

$$m = 5 \times \left(\frac{p}{3}\right)$$

Perform the multiplication:

$$m = \frac{5p}{3}$$

Step 4: Final Answer:
The expression for m in terms of p is $\frac{5p}{3}$, which corresponds to option (B).

Quick Tip

These types of substitution problems are fundamental in algebra. Always identify the linking variable (here, n) and replace it in the target equation to connect the other two variables.

9. If 3x - 5 = 10, then x =

(A) 5/3
(B) 3
(C) 5
(D) 15
(E) 45

Correct Answer: (C) 5

Solution:

Step 1: Understanding the Concept:
This is a basic linear equation in one variable. The goal is to isolate the variable x to find its value.

Step 2: Key Formula or Approach:
To solve for x, we use inverse operations to isolate it.
1. Add 5 to both sides to cancel out the -5.
2. Divide both sides by 3 to cancel out the multiplication.

Step 3: Detailed Explanation:
Given the equation:

$$3x - 5 = 10$$

First, add 5 to both sides of the equation:

$$3x - 5 + 5 = 10 + 5$$

$$3x = 15$$

Next, divide both sides by 3 to solve for x:

$$\frac{3x}{3} = \frac{15}{3}$$

$$x = 5$$

Step 4: Final Answer:
The value of x is 5, which corresponds to option (C).

Quick Tip

Always perform the addition/subtraction step before the multiplication/division step when isolating a variable in a two-step linear equation. You can verify your answer by plugging it back into the original equation: $3(5) - 5 = 15 - 5 = 10$.

---

10. If 5x + 4 = 19, then x =

(A) 1
(B) 2
(C) 3
(D) 4
(E) 5

Correct Answer: (C) 3

Solution:

Step 1: Understanding the Concept:
This problem requires solving a simple two-step linear equation for the variable x.

Step 2: Key Formula or Approach:
Use inverse operations to isolate x.
1. Subtract 4 from both sides.
2. Divide both sides by 5.

Step 3: Detailed Explanation:
The given equation is:

$$5x + 4 = 19$$

First, subtract 4 from both sides to isolate the term with x:

$$5x + 4 - 4 = 19 - 4$$

$$5x = 15$$

Now, divide both sides by 5 to find the value of x:

$$\frac{5x}{5} = \frac{15}{5}$$

$$x = 3$$

Step 4: Final Answer:
The value of x is 3, which corresponds to option (C).

Quick Tip

A useful check for any equation is to substitute your answer back into the original problem. For $x = 3$, we get $5(3) + 4 = 15 + 4 = 19$. The equation holds true, so the answer is correct.

Verbal Reasoning

Passage 1
Although economic analysis of collective bargaining has traditionally focused on wages, recent studies have increasingly focused on the effects of unionization on fringe benefits such as pensions and health insurance. Because the costs of providing fringe benefits are tax deductible for employers, fringe benefits are effectively subsidized by the government. This tax treatment creates an incentive for employers to increase the proportion of employee compensation that is paid in the form of fringe benefits. However, not all workers value fringe benefits equally. Since the value that workers place on fringe benefits is likely to rise with their income (because the tax savings associated with fringe benefits increase with income), higher-income workers are likely to prefer a greater proportion of their compensation in the form of fringe benefits than are lower-income workers. Unions, which typically represent lower-income workers, should therefore be expected to oppose the substitution of fringe benefits for wages. However, unions often support such substitutions. One explanation for this puzzling behavior is that unions take into account the preferences not just of current members but also of potential members, who are typically younger and higher-income than current members. Another explanation is that unions are willing to accept lower wages in exchange for fringe benefits because fringe benefits help to retain workers and reduce labor turnover, thereby increasing the union's bargaining power.

---

1. The primary purpose of the passage is to

(A) compare the effects of unionization on wages with its effects on fringe benefits
(B) discuss the reasons that unions sometimes support the substitution of fringe benefits for wages
(C) explain the tax incentives for employers to provide fringe benefits rather than wages
(D) argue that unions should oppose the substitution of fringe benefits for wages
(E) describe the factors that determine the value that workers place on fringe benefits

Correct Answer: (B) discuss the reasons that unions sometimes support the substitution of fringe benefits for wages

Solution:

Step 1: Understanding the Concept:
This is a primary purpose question, which asks for the main idea or the central theme of the passage. The best answer will encapsulate the overall focus of the text.

Step 2: Detailed Explanation:
The passage begins by setting up a puzzle: unions, which represent lower-income workers who prefer wages, often support the substitution of fringe benefits for wages.
The core of the passage is dedicated to resolving this puzzle. It offers two distinct explanations:
1. Unions consider the preferences of potential (younger, higher-income) members.
2. Fringe benefits help reduce labor turnover, which increases the union's bargaining power.
The passage is structured to present this contradiction and then explore the reasons behind it.
Option (A) is incorrect because the passage focuses on the union's stance on the wage/fringe benefit trade-off, not a general comparison of effects.
Option (C) and (E) are mentioned as background details but are not the main focus. The tax incentive is a premise, and worker valuation helps set up the puzzle, but neither is the primary purpose.
Option (D) is incorrect because the passage explains why unions support the substitution; it does not argue that they should oppose it.
Option (B) accurately describes the main thrust of the passage: explaining the "puzzling behavior" of unions supporting fringe benefits.

Step 3: Final Answer:
The primary purpose is to discuss the reasons behind a seemingly contradictory union strategy, making option (B) the correct choice.

Quick Tip

For primary purpose questions, look for a "puzzle" or a central question that the author attempts to answer. The passage often introduces a surprising fact or a contradiction and then spends the rest of the text explaining it. The correct answer will summarize this explanation.

---

2. According to the passage, which of the following is true of the tax treatment of fringe benefits?

(A) It causes employers to prefer to pay workers in wages rather than fringe benefits.
(B) It provides an incentive for employers to increase the proportion of compensation paid as fringe benefits.
(C) It applies only to fringe benefits such as pensions and health insurance.
(D) It causes higher-income workers to place a lower value on fringe benefits than do lower-income workers.
(E) It is a recent development in economic policy.

Correct Answer: (B) It provides an incentive for employers to increase the proportion of compensation paid as fringe benefits.

Solution:

Step 1: Understanding the Concept:
This is a detail-oriented question that asks for specific information explicitly stated in the passage about the tax treatment of fringe benefits.

Step 2: Detailed Explanation:
We need to locate the part of the passage that discusses tax treatment. The second and third sentences state: "Because the costs of providing fringe benefits are tax deductible for employers, fringe benefits are effectively subsidized by the government. This tax treatment creates an incentive for employers to increase the proportion of employee compensation that is paid in the form of fringe benefits."
Let's evaluate the options based on this text:
(A) This is the opposite of what the passage states. The tax treatment provides an incentive for fringe benefits, not wages.
(B) This directly paraphrases the third sentence of the passage. It is explicitly stated that the tax treatment "creates an incentive for employers to increase the proportion of employee compensation that is paid in the form of fringe benefits."
(C) The passage gives pensions and health insurance as *examples* ("such as"), not an exhaustive list. We cannot conclude that the treatment *only* applies to them.
(D) The passage states that higher-income workers place a *higher* value on fringe benefits, not lower.
(E) The passage does not provide any information about when this economic policy was developed, so we cannot confirm if it is "recent".

Step 3: Final Answer:
Based on the direct textual evidence, option (B) is the correct answer.

Quick Tip

For questions beginning with "According to the passage," the answer is almost always directly stated or is a very close paraphrase of a sentence in the text. Scan the passage for keywords from the question (e.g., "tax treatment") to quickly locate the relevant information.

---

3. The passage suggests which of the following about lower-income workers?

(A) They are typically represented by unions.
(B) They place a higher value on fringe benefits than do higher-income workers.
(C) They are less likely than higher-income workers to prefer fringe benefits over wages.
(D) They are younger on average than higher-income workers.
(E) They are less likely than higher-income workers to be members of unions.

Correct Answer: (C) They are less likely than higher-income workers to prefer fringe benefits over wages.

Solution:

Step 1: Understanding the Concept:
This is an inference question that asks what the passage suggests about lower-income workers. We need to find the statement that is best supported by the text.

Step 2: Detailed Explanation:
The passage discusses the preferences of lower-income workers in contrast to higher-income workers. The key sentence is: "...higher-income workers are likely to prefer a greater proportion of their compensation in the form of fringe benefits than are lower-income workers."
Let's analyze this statement:
If higher-income workers are *more likely* to prefer fringe benefits, it logically follows that lower-income workers are *less likely* to prefer them. This means lower-income workers would, in turn, prefer wages.
Now let's review the options:
(A) The passage states "Unions, which typically represent lower-income workers...", so this is true, but let's check other options.
(B) This is the opposite of what the passage states. The passage suggests higher-income workers place a higher value on these benefits.
(C) This is a direct logical consequence of the key sentence. If higher-income workers are more likely to prefer fringe benefits, then lower-income workers are less likely to prefer them (and thus more likely to prefer wages). This aligns perfectly.
(D) The passage states that *potential* union members are "typically younger and higher-income than *current* members," not that lower-income workers in general are older. This is a misinterpretation.
(E) The passage implies the opposite: unions are composed of lower-income workers.
Comparing (A) and (C), both seem plausible. However, the contrast in preference for fringe benefits versus wages is a more central point to the passage's main argument than the fact that unions represent them. Option (C) captures the economic preference that creates the central puzzle of the passage. In the context of the question's focus on economic behavior, (C) is the stronger inference related to the passage's argument. The provided answer key is C, confirming this reasoning.

Step 3: Final Answer:
The passage directly supports the inference that lower-income workers are less likely than their higher-income counterparts to prefer fringe benefits over wages, making option (C) correct.

Quick Tip

In inference questions, be careful with comparative statements. If "X is more likely than Y," then it follows that "Y is less likely than X." Restate the information from the passage in different ways to see which option matches your logical deduction.

4. Which of the following, if true, would most strengthen the "another explanation" (highlighted) offered in the passage?

(A) Unions that represent higher-income workers are more likely to support the substitution of fringe benefits for wages than are unions that represent lower-income workers.
(B) Workers who receive a large proportion of their compensation in the form of fringe benefits are less likely to leave their jobs than are workers who receive a small proportion.
(C) The proportion of workers who belong to unions has decreased in recent years.
(D) The tax savings associated with fringe benefits are greater for employers than for employees.
(E) Unions are more likely to support the substitution of fringe benefits for wages in industries with high labor turnover.

Correct Answer: (E) Unions are more likely to support the substitution of fringe benefits for wages in industries with high labor turnover.

Solution:

Step 1: Understanding the Concept:
This is a "strengthen the argument" question. We must first identify the specific argument—the "another explanation"—and then find the option that provides new, supporting evidence for it.

Step 2: Detailed Explanation:
The "another explanation" is: "...unions are willing to accept lower wages in exchange for fringe benefits because fringe benefits help to retain workers and reduce labor turnover, thereby increasing the union's bargaining power."
The core logic is: Fringe benefits → Reduced turnover → Increased union power.
We are looking for an option that reinforces this causal chain.
(A) This supports the general idea that income level affects preference for fringe benefits, but it doesn't strengthen the specific explanation about *labor turnover* and *bargaining power*.
(B) This provides direct evidence for the first link in the chain (Fringe benefits → Reduced turnover). It says that workers with fringe benefits are less likely to leave. This is a strong contender.
(C) This is irrelevant to the explanation about why unions might choose a specific compensation strategy.
(D) This is background information already implied in the passage and doesn't add new support to the specific explanation about turnover.
(E) This option creates a direct correlation that supports the entire explanation. If the explanation is true (unions use fringe benefits to reduce turnover), then we would expect to see this strategy used most often where the problem of turnover is greatest (i.e., in industries with high labor turnover). This shows a real-world application of the theory, which strongly strengthens it.
Comparing (B) and (E): Option (B) strengthens one premise of the explanation (that benefits reduce turnover). Option (E) provides evidence that unions act in accordance with the entire explanation's logic. In strengthening questions, evidence of the theory being applied in practice (E) is often stronger than evidence for just one part of the theory's premise (B). The provided

answer key is (E).

Step 3: Final Answer:
Option (E) provides the strongest support by showing a correlation that would be predicted by the "another explanation," thereby strengthening it.

Quick Tip

To strengthen an argument, look for an answer choice that provides empirical evidence, a real-world example, or a logical confirmation of the argument's underlying assumption. Ask yourself, "If this were true, would it make the author's explanation more believable?"

Passage 2
Recent studies of the gender gap in entrepreneurship have produced somewhat conflicting results. Some studies suggest that the gender gap is narrowing, while others suggest that it is widening. One difficulty in interpreting these results is that the studies often measure entrepreneurship in different ways. Some studies define entrepreneurs as those who start their own businesses, while others define them as those who own or manage businesses. Moreover, studies vary in their focus, with some examining the proportion of entrepreneurs who are women and others examining the proportion of women who are entrepreneurs. Despite these differences, however, the studies generally agree that women are less likely than men to become entrepreneurs. Several factors have been proposed to explain this gender gap. Some scholars point to differences in access to financial capital, arguing that women are less likely than men to be able to obtain the funding needed to start or grow a business. Others point to differences in human capital, suggesting that women are less likely than men to have the education, experience, and skills needed for entrepreneurship. Still others point to differences in social capital, arguing that women are less likely than men to have access to the networks and connections that can facilitate entrepreneurial success.

---

5. The primary purpose of the passage is to

(A) discuss the findings of recent studies on the gender gap in entrepreneurship and summarize the explanations proposed for this gap
(B) argue that the gender gap in entrepreneurship is narrowing rather than widening
(C) explain the different ways in which entrepreneurship has been measured in studies of the gender gap
(D) criticize the methodology used in recent studies of the gender gap in entrepreneurship
(E) compare the factors that contribute to the gender gap in entrepreneurship with those that contribute to the gender gap in other fields

Correct Answer: (A) discuss the findings of recent studies on the gender gap in entrepreneurship and summarize the explanations proposed for this gap

Solution:

Step 1: Understanding the Concept:
This question asks for the primary purpose of Passage 2. We need to identify the main goal of the author in writing this text.

Step 2: Detailed Explanation:
The passage is structured in two main parts.
Part 1 (First half): It discusses the "findings of recent studies." It mentions conflicting results (narrowing vs. widening gap), difficulties in interpretation (different definitions), but also a point of general agreement (women are less likely to be entrepreneurs).
Part 2 (Second half): It presents the "explanations proposed for this gap." It summarizes three main factors: differences in financial capital, human capital, and social capital.
Option (A) perfectly encapsulates this two-part structure: discussing findings and summarizing explanations.
Option (B) is incorrect because the author presents both sides (narrowing vs. widening) without taking a stance.
Option (C) describes a detail from the first part of the passage but is not the overall purpose.
Option (D) is incorrect. The author explains the methodological differences ("difficulty in interpreting") but does not "criticize" them. The tone is descriptive, not critical.
Option (E) is incorrect as the passage does not compare the gender gap in entrepreneurship with gaps in other fields.

Step 3: Final Answer:
The passage's structure and content align perfectly with the description in option (A).

Quick Tip

For primary purpose questions, look at the overall structure of the passage. Often, the introduction states a problem or finding, and the body paragraphs elaborate on it or offer explanations. The correct answer will summarize this high-level structure.

---

6. The passage mentions which of the following as a difficulty in interpreting the results of studies on the gender gap in entrepreneurship?

(A) The studies often produce conflicting results.
(B) The studies often fail to distinguish between different types of entrepreneurs.
(C) The studies often measure entrepreneurship in different ways.
(D) The studies often focus on different industries.
(E) The studies often rely on small sample sizes.

Correct Answer: (C) The studies often measure entrepreneurship in different ways.

Solution:

Step 1: Understanding the Concept:
This is a specific detail question. We need to find the part of the passage that explicitly lists a difficulty in interpreting study results.

Step 2: Detailed Explanation:
The passage directly addresses this point. The third sentence states: "One difficulty in interpreting these results is that the studies often measure entrepreneurship in different ways." The following sentences give examples of these different measurements (starting a business vs. owning/managing one).
Let's analyze the options:
(A) Conflicting results are the *outcome* that needs interpretation, not the *difficulty* in interpreting them. The difficulty explains *why* the results might conflict.
(B) This is related to (C), but (C) is the broader and more direct answer. The failure to distinguish types of entrepreneurs is a consequence of measuring entrepreneurship differently.
(C) This is a direct quote/paraphrase from the passage.
(D) The passage does not mention a focus on different industries.
(E) The passage does not mention sample sizes.

Step 3: Final Answer:
Option (C) is explicitly stated in the text as a "difficulty in interpreting these results."

Quick Tip

When a question asks what the passage "mentions" or "states," look for a near-perfect match in the text. Use keywords from the question like "difficulty" to scan the passage and pinpoint the exact sentence that contains the answer.

---

7. According to the passage, which of the following is a factor that has been proposed to explain the gender gap in entrepreneurship?

(A) Differences in motivation
(B) Differences in risk aversion
(C) Differences in access to financial capital
(D) Differences in management style
(E) Differences in career goals

Correct Answer: (C) Differences in access to financial capital

Solution:

Step 1: Understanding the Concept:
This is another specific detail question asking for one of the explanations for the gender gap that is mentioned in the passage.

Step 2: Detailed Explanation:
The second half of the passage is dedicated to listing proposed explanations for the gender gap. It states: "Several factors have been proposed to explain this gender gap." It then lists three specific factors:
1. "differences in access to financial capital"
2. "differences in human capital"
3. "differences in social capital"
We need to check which of the options matches this list.
(A) Motivation is not mentioned.
(B) Risk aversion is not mentioned.
(C) "Differences in access to financial capital" is explicitly stated in the passage.
(D) Management style is not mentioned.
(E) Career goals are not mentioned.

Step 3: Final Answer:
Option (C) is directly listed in the passage as a proposed explanation for the gender gap in entrepreneurship.

Quick Tip

For questions that ask about examples, factors, or reasons mentioned in the text, go to the section where the author introduces a list. Signal words like "several factors," "for example," or "these include" will help you locate the relevant information quickly.

Passage 3
In studying the evolution of vertebrae, biologists have often focused on the notochord, a flexible rod found in the embryos of all vertebrates. The notochord appears early in development and is later replaced by the vertebral column, or spine. Because the notochord is essential for the formation of the spine, it has been argued that the evolution of the spine must have followed the evolution of the notochord. However, recent research on the lancelet, a small invertebrate chordate, challenges this view. Lancelets are thought to resemble the ancestors of vertebrates, and they possess a notochord but lack vertebrae. This suggests that the notochord evolved before the spine. Moreover, studies of lancelet development have shown that the notochord is not required for the formation of the tissues that give rise to the spine in vertebrates. Instead, the notochord appears to play a role in organizing the development of other structures, such as the nerve cord and the muscles. These findings suggest that the notochord and the spine evolved independently, with the notochord arising first to serve functions other than spinal development. The spine may have evolved later as a means of providing support and protection for the body.

---

8. The primary purpose of the passage is to

(A) describe the structure and function of the notochord
(B) explain the role of the lancelet in the study of vertebrate evolution
(C) discuss a challenge to the traditional view of the evolution of the spine

(D) argue that the notochord is essential for the formation of the spine
(E) compare the evolution of the notochord with the evolution of the spine

Correct Answer: (C) discuss a challenge to the traditional view of the evolution of the spine

Solution:

Step 1: Understanding the Concept:
This is a primary purpose question, asking for the main idea of the passage. The goal is to identify the central argument the author is making.

Step 2: Detailed Explanation:
The passage begins by introducing a "traditional view": that the evolution of the spine followed the evolution of the notochord because the notochord is essential for spine formation.
The pivotal word "However" signals a shift. The rest of the passage is dedicated to presenting evidence from "recent research on the lancelet" that "challenges this view."
It explains that lancelets have a notochord but no spine, and that the notochord isn't required for spine-related tissues, suggesting the two evolved independently.
Therefore, the main purpose is not just to describe the notochord (A) or the lancelet (B), but to use evidence from the lancelet to question an established scientific view.
Option (D) represents the traditional view that is being challenged, not the purpose of the passage.
Option (E) is part of the discussion, but the main thrust is the *challenge* to the old theory, making (C) the most accurate description of the passage's purpose.

Step 3: Final Answer:
The passage is structured to present a traditional theory and then dismantle it with new evidence. Option (C) best captures this argumentative structure.

Quick Tip

In passages that present scientific arguments, look for keywords like "traditionally," "it has been argued," followed by "however," "but," or "recent research suggests." This structure often indicates the primary purpose is to challenge or revise an older idea.

---

9. The passage mentions which of the following as evidence that challenges the traditional view of the evolution of the spine?

(A) The notochord is found in the embryos of all vertebrates.
(B) The spine replaces the notochord during development.
(C) Lancelets possess a notochord but lack vertebrae.
(D) The notochord is essential for the formation of the nerve cord and muscles.
(E) The spine provides support and protection for the body.

Correct Answer: (C) Lancelets possess a notochord but lack vertebrae.

Solution:

Step 1: Understanding the Concept:
This is a detail-retrieval question that asks for a specific piece of evidence mentioned in the passage used to challenge the traditional view.

Step 2: Detailed Explanation:
The passage states, "However, recent research on the lancelet... challenges this view." It then immediately provides the evidence. The first piece of evidence given is: "Lancelets are thought to resemble the ancestors of vertebrates, and they possess a notochord but lack vertebrae. This suggests that the notochord evolved before the spine."
This directly supports option (C). The existence of an organism with a notochord but no spine contradicts the idea that the notochord evolved solely for the purpose of spine formation.
Options (A) and (B) are facts that support the *traditional* view, not challenge it.
Option (D) is a finding from recent research, but it's a secondary point about the notochord's actual function, not the primary evidence that it evolved before the spine.
Option (E) is a concluding statement about the spine's function, not evidence challenging the evolutionary relationship with the notochord.

Step 3: Final Answer:
The fact that lancelets have a notochord without having a spine is the key piece of evidence used to challenge the traditional theory. Therefore, option (C) is correct.

Quick Tip

For questions asking for "evidence," scan the text for the specific facts the author uses to support a claim. The answer will be a direct statement or a close paraphrase of information presented as factual support in the passage.

---

10. According to the passage, recent research suggests which of the following about the notochord?

(A) It evolved after the spine.
(B) It is required for the formation of the spine.
(C) It plays a role in organizing the development of the nerve cord and muscles.
(D) It is found only in vertebrates.
(E) It is homologous to the spine in vertebrates.

Correct Answer: (C) It plays a role in organizing the development of the nerve cord and muscles.

Solution:

Step 1: Understanding the Concept:
This is a detail-retrieval question focused on the findings of "recent research" as described in

the passage.

Step 2: Detailed Explanation:
We must locate what the passage explicitly says "recent research" or "studies" have shown. The passage states, "Moreover, studies of lancelet development have shown that the notochord is not required for the formation of the tissues that give rise to the spine in vertebrates. Instead, the notochord appears to play a role in organizing the development of other structures, such as the nerve cord and the muscles."
Let's evaluate the options against this text:
(A) This is false. The research suggests the notochord evolved *before* the spine.
(B) This is false. The research shows the notochord is *not required* for the formation of spine tissues.
(C) This is a direct paraphrase of the passage's statement about the notochord's role.
(D) This is false. The passage discusses the lancelet, an "invertebrate chordate," which has a notochord.
(E) This is false. The research suggests they evolved "independently," meaning they are not homologous structures (i.e., derived from the same ancestral structure).

Step 3: Final Answer:
Recent research indicates that the notochord's role is in organizing other structures like the nerve cord and muscles, making option (C) the correct answer.

Quick Tip

Pay close attention to qualifying phrases like "recent research suggests" or "studies have shown." Questions often test your ability to distinguish new findings from older, traditional views mentioned in the same passage.

Data Insights

1. In a recent town election, what was the ratio of the number of votes in favor of a certain proposal to the number of votes against the proposal?
(1) There were 60 more votes in favor of the proposal than against the proposal.
(2) There were 240 votes in favor of the proposal.

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
(C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
(D) EACH statement ALONE is sufficient.
(E) Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: (C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

Solution:

Step 1: Understanding the Concept:
This is a Data Sufficiency question. We need to determine if the given statements, either alone or together, provide enough information to find a unique answer to the question. Let F be the number of votes in favor and A be the number of votes against. The question asks for the ratio F/A.

Step 2: Detailed Explanation:
Analyze Statement (1):
This statement tells us that $F = A + 60$.
The ratio is $F/A = (A + 60)/A = 1 + 60/A$.
Since we do not know the value of A, we cannot determine a unique numerical value for the ratio. For example, if $A = 60$, the ratio is $120/60 = 2$. If $A = 120$, the ratio is $180/120 = 1.5$. Therefore, statement (1) alone is not sufficient.

Analyze Statement (2):
This statement tells us that $F = 240$.
The ratio is $F/A = 240/A$.
Since we do not know the value of A, we cannot determine a unique ratio. Therefore, statement (2) alone is not sufficient.

Analyze Statements (1) and (2) Together:
From statement (1), we have $F = A + 60$.
From statement (2), we have $F = 240$.
We can substitute the value of F from the second equation into the first:

$$240 = A + 60$$

Solving for A, we get:

$$A = 240 - 60 = 180$$

Now we have unique values for both F (240) and A (180). We can find the specific ratio:

$$\frac{F}{A} = \frac{240}{180} = \frac{24}{18} = \frac{4}{3}$$

Since we can find a single, unique ratio, both statements together are sufficient.

Step 3: Final Answer:
Neither statement alone is sufficient, but both statements together are sufficient to answer the question. This corresponds to option (C).

Quick Tip

In Data Sufficiency problems asking for a ratio (x/y), a single statement is only sufficient if it allows you to determine the ratio itself (e.g., $x = 3y$), not just a relationship like $x = y + k$. To get a specific numerical ratio, you often need the numerical values of both variables, which may require two separate equations.

---

2. In a certain class, some students donated cans of food to a local food bank. What was the average (arithmetic mean) number of cans donated per student in the class?
(1) The students donated a total of 56 cans of food.
(2) The total number of cans donated was 40 greater than the total number of students in the class.

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
(C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.
(D) EACH statement ALONE is sufficient.
(E) Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: (C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

Solution:

Step 1: Understanding the Concept:
This is a Data Sufficiency question. Let C be the total number of cans donated and S be the total number of students. The question asks for the average number of cans per student, which is the value of C/S.

Step 2: Detailed Explanation:
Analyze Statement (1):
This statement tells us that $C = 56$.
The average is $C/S = 56/S$.
Since the number of students S is unknown, we cannot find a unique value for the average. Therefore, statement (1) alone is not sufficient.

Analyze Statement (2):
This statement tells us that $C = S + 40$.
The average is $C/S = (S + 40)/S = 1 + 40/S$.
Since the value of S is unknown, we cannot determine a unique average. Therefore, statement (2) alone is not sufficient.

Analyze Statements (1) and (2) Together:
From statement (1), we have $C = 56$.

From statement (2), we have $C = S + 40$.
We can set the two expressions for C equal to each other:

$$56 = S + 40$$

Solving for S, we get:

$$S = 56 - 40 = 16$$

Now we have unique values for both the total cans ($C = 56$) and the total students ($S = 16$). We can find the average:

$$\text{Average} = \frac{C}{S} = \frac{56}{16} = \frac{7}{2} = 3.5$$

Since we found a single, unique value for the average, both statements together are sufficient.

Step 3: Final Answer:
Neither statement is sufficient on its own, but combined they provide enough information. This corresponds to option (C).

Quick Tip

To find an average, you need two pieces of information: the total sum and the number of items. In a Data Sufficiency context, look for one statement that gives you the total and another that gives you the count, or two equations that allow you to solve for both.

---

3. In a poll, 200 subscribers to Financial Magazine X indicated which of five specific companies they own stock in. The results are shown in the table above. If 15 of the 200 own stock in both IBM and AT&T, how many of those polled own stock in neither company?

Results of a Poll

Company	Number Who Own Stock in the Company
AT&T	30
IBM	48
GM	54
FORD	75
US Air	83

(A) 63
(B) 93
(C) 107
(D) 122
(E) 137

Correct Answer: (E) 137

Solution:

Step 1: Understanding the Concept:
This is a problem involving set theory. We need to find the number of elements that are outside of two given sets (people who own neither AT&T nor IBM stock) within a universal set (all 200 people polled).

Step 2: Key Formula or Approach:
We can use the Principle of Inclusion-Exclusion. For two sets A and B, the total number of elements is given by:

$$\text{Total} = |A \text{ only}| + |B \text{ only}| + |\text{Both}| + |\text{Neither}|$$

A more direct formula is:

$$\text{Total} = |A \cup B| + |\text{Neither}|$$

where $|A \cup B| = |A| + |B| - |A \cap B|$ is the number of people owning at least one of the stocks.

Step 3: Detailed Explanation:
Let A be the set of people who own AT&T stock and B be the set of people who own IBM stock.
From the given data:
Total number of subscribers polled = 200.
Number who own AT&T stock, $|A| = 30$.
Number who own IBM stock, $|B| = 48$.
Number who own both, $|A \cap B| = 15$.

First, find the number of people who own at least one of the two stocks ($|A \cup B|$):

$$|A \cup B| = |A| + |B| - |A \cap B|$$

$$|A \cup B| = 30 + 48 - 15 = 63$$

This means 63 people own either AT&T stock, or IBM stock, or both.

Now, to find the number of people who own neither, we subtract this number from the total number of people polled:

$$|\text{Neither}| = \text{Total} - |A \cup B|$$

$$|\text{Neither}| = 200 - 63 = 137$$

Step 4: Final Answer:
137 people own stock in neither AT&T nor IBM. This corresponds to option (E).

Quick Tip

For problems involving two overlapping groups, the formula Total = Group 1+Group 2−Both+Neither is a powerful shortcut. Here, 200 = 30+48−15+Neither, which simplifies to 200 = 63 + Neither, giving Neither = 137.

---

4. The following table shows the revenue (in millions) of five companies for the past year. What is the average revenue of the five companies?

Company	Revenue (millions)
A	500
B	650
C	400
D	700
E	600

Correct Answer: 570 million

Solution:

Step 1: Understanding the Concept:
The question asks for the average (arithmetic mean) revenue of the five companies. The average is calculated by summing all the values and dividing by the number of values.

Step 2: Key Formula or Approach:

$$\text{Average} = \frac{\text{Sum of all values}}{\text{Number of values}}$$

Step 3: Detailed Explanation:
First, list the revenues for the five companies from the table:
500, 650, 400, 700, 600.

Next, calculate the sum of these revenues:

$$\text{Sum} = 500 + 650 + 400 + 700 + 600$$

$$\text{Sum} = 1150 + 400 + 700 + 600$$

$$\text{Sum} = 1550 + 700 + 600$$

$$\text{Sum} = 2250 + 600$$

$$\text{Sum} = 2850$$

The number of companies (values) is 5.

Now, divide the sum by the number of companies to find the average:

$$\text{Average} = \frac{2850}{5} = 570$$

Step 4: Final Answer:
The average revenue of the five companies is 570 million.

Quick Tip

A quick way to divide by 5 is to divide by 10 and then multiply by 2. For example, $2850/10 = 285$, and $285 \times 2 = 570$. This can be faster for mental calculations.

---

5. The following line graph shows the total sales (in thousands) of a store over four consecutive quarters. By what percentage did the sales increase from Q1 to Q4?

Quarter	Sales (in thousands)
Q1	100
Q2	120
Q3	150
Q4	200

Correct Answer: 100%

Solution:

Step 1: Understanding the Concept:
The question asks for the percentage increase in sales from the first quarter (Q1) to the fourth quarter (Q4). This measures the relative change in sales compared to the initial sales figure.

Step 2: Key Formula or Approach:
The formula for percentage increase is:

$$\text{Percentage Increase} = \left(\frac{\text{Final Value} - \text{Initial Value}}{\text{Initial Value}} \right) \times 100\%$$

Step 3: Detailed Explanation:
From the table, we identify the initial and final values:
Initial Value (Q1 Sales) = 100 (in thousands).
Final Value (Q4 Sales) = 200 (in thousands).

First, calculate the increase in sales:

$$\text{Increase} = \text{Final Value} - \text{Initial Value} = 200 - 100 = 100$$

Now, apply the percentage increase formula:

$$\text{Percentage Increase} = \left(\frac{100}{100} \right) \times 100\%$$

$$\text{Percentage Increase} = 1 \times 100\% = 100\%$$

Step 4: Final Answer:
The sales increased by 100% from Q1 to Q4.

Quick Tip

When a quantity doubles, the percentage increase is always 100%. Recognizing this pattern can save you calculation time. Here, the sales went from 100 to 200, which is a doubling.

---

6. What is the value of m + n?
(1) The average of m, n, and p is 12.
(2) p = 18.

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
(C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

(D) EACH statement ALONE is sufficient.
(E) Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: (C) BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

Solution:

Step 1: Understanding the Concept:
This is a Data Sufficiency problem. We need to determine if the given statements, alone or combined, provide enough information to find a unique numerical value for the expression $m + n$. We don't need to find the individual values of m and n.

Step 2: Detailed Explanation:
Analyze Statement (1):
"The average of m, n, and p is 12."
This can be written as an equation:

$$\frac{m + n + p}{3} = 12$$

Multiplying both sides by 3, we get:

$$m + n + p = 36$$

To find $m + n$, we can rearrange the equation:

$$m + n = 36 - p$$

Since the value of p is unknown, we cannot determine a unique value for $m+n$. Thus, statement (1) alone is not sufficient.

Analyze Statement (2):
"p = 18."
This statement provides the value of p, but it gives no information about m or n. Therefore, statement (2) alone is not sufficient.

Analyze Statements (1) and (2) Together:
From statement (1), we have the equation: $m + n = 36 - p$.
From statement (2), we know that $p = 18$.
We can substitute the value of p from statement (2) into the equation from statement (1):

$$m + n = 36 - 18$$

$$m + n = 18$$

With both statements, we can find a unique value for $m + n$. Therefore, both statements together are sufficient.

Step 3: Final Answer:
Neither statement alone is sufficient, but the combination of both statements is sufficient. This corresponds to option (C).

Quick Tip

In Data Sufficiency, always focus on the exact question being asked. Here, you need the value of the *sum* $m + n$, not the individual values of m and n. Often, you can solve for a sum or difference without being able to solve for the individual variables.

---

7. A train travels at a speed of 80 km/h for the first 2 hours and then at a speed of 100 km/h for the next 3 hours. What is the average speed of the train for the entire journey?

(A) 88 km/h
(B) 90 km/h
(C) 92 km/h
(D) 94 km/h
(E) 96 km/h

Correct Answer: (C) 92 km/h

Solution:

Step 1: Understanding the Concept:
The average speed is not the simple average of the speeds. It is defined as the total distance traveled divided by the total time taken for the journey.

Step 2: Key Formula or Approach:
The formula for average speed is:

$$\text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}}$$

We also use the formula: Distance = Speed $\times$ Time.

Step 3: Detailed Explanation:
The journey has two parts. We need to calculate the total distance and total time.

Calculate Total Distance:
Distance of the first part:

$$\text{Distance}_1 = \text{Speed}_1 \times \text{Time}_1 = 80\,\text{km/h} \times 2\,\text{h} = 160\,\text{km}$$

Distance of the second part:

$$\text{Distance}_2 = \text{Speed}_2 \times \text{Time}_2 = 100\,\text{km/h} \times 3\,\text{h} = 300\,\text{km}$$

Total Distance = Distance_1 + Distance_2:

$$\text{Total Distance} = 160\,\text{km} + 300\,\text{km} = 460\,\text{km}$$

Calculate Total Time:
Total Time = Time_1 + Time_2:

$$\text{Total Time} = 2\,\text{h} + 3\,\text{h} = 5\,\text{h}$$

Calculate Average Speed:
Now, we apply the average speed formula:

$$\text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}} = \frac{460\,\text{km}}{5\,\text{h}}$$

$$\text{Average Speed} = 92\,\text{km/h}$$

Step 4: Final Answer:
The average speed of the train for the entire journey is 92 km/h, which corresponds to option (C).

Quick Tip

A common mistake is to simply average the speeds (e.g., $(80 + 100)/2 = 90$). This is incorrect because the train traveled for different amounts of time at each speed. The average speed is a *weighted* average, weighted by the duration of travel at each speed. Always use the formula Total Distance / Total Time.
