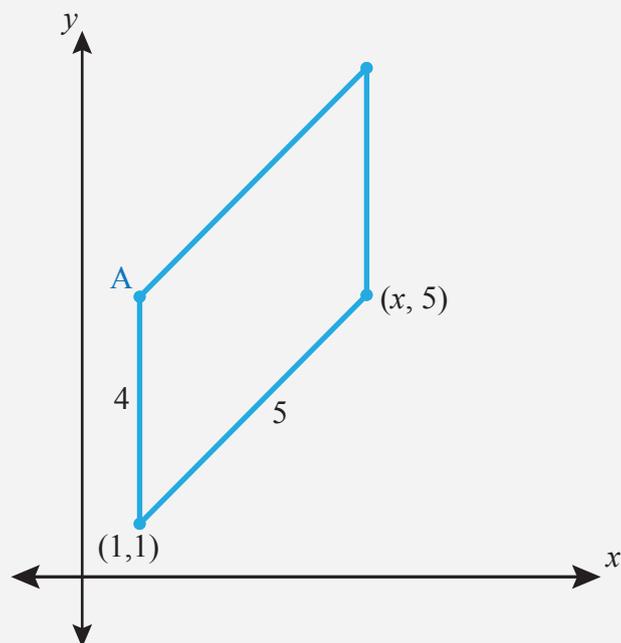


Mathematics Level 5

Measurement and Geometry

Example: Geometry

A parallelogram, with side lengths of 4 and 5, is drawn on a Cartesian plane.



What is the value of x ?

- A 1
- B 4
- C 5
- D 9

ANSWER B: 4

Students select option A: as they may use the coordinates given.

Students select option C: as they may use the y coordinate given.

Students select option D: as they may use the y coordinate of the vertex at top right.

COMMENTARY

Students are required to identify a particular coordinate of a given point. They should be able to use the distance formula with the information given to work backwards and identify the x coordinate.

The distance between the two points $(1,1)$ and $(x,5)$ is given on the diagram as 5.

So, using the distance formula gives:

$$\begin{aligned}\sqrt{(x-1)^2 + (5-1)^2} &= 5 \\ (x-1)^2 + 4^2 &= 25 \\ (x-1)^2 + 16 &= 25 \\ (x-1)^2 &= 9 \\ x-1 &= 3 \\ x &= 4\end{aligned}$$

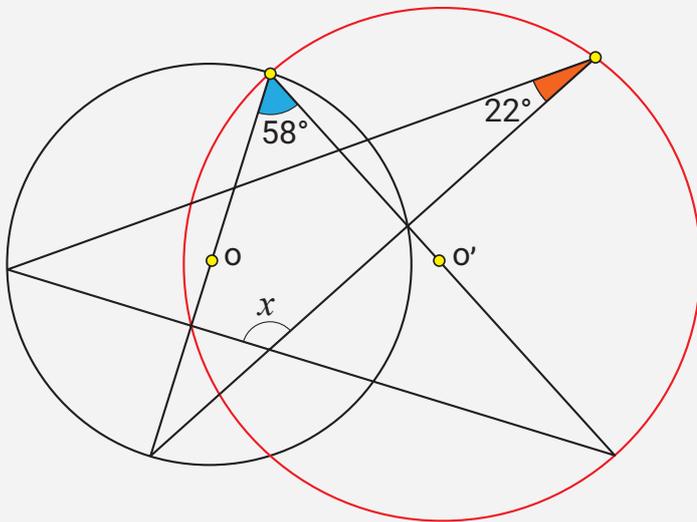
Mathematics Level 5

Measurement and Geometry

Example: Measurement

The diagram shows two overlapping circles with centres O and O' respectively.

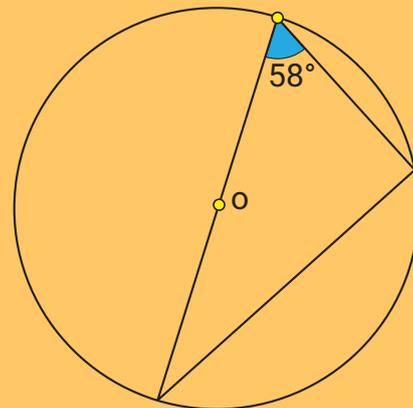
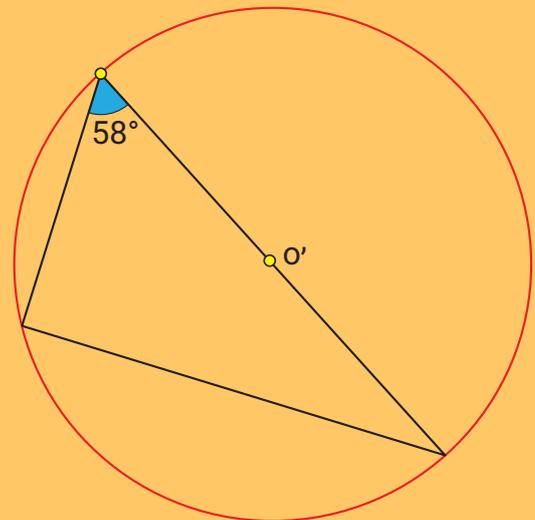
Some lines have been drawn through these circles.



What is the size of the angle marked x ?

ANSWER 122°

COMMENTARY



Knowing this, and the fact that the internal angles in a quadrilateral sum to 360° , they can then determine the unknown angle x .

$$58 + 90 + 90 + x = 360$$

So,

$$\begin{aligned} x &= 360 - (58 + 90 + 90) \\ &= 360 - 238 \\ &= 122 \end{aligned}$$

Common errors may include:

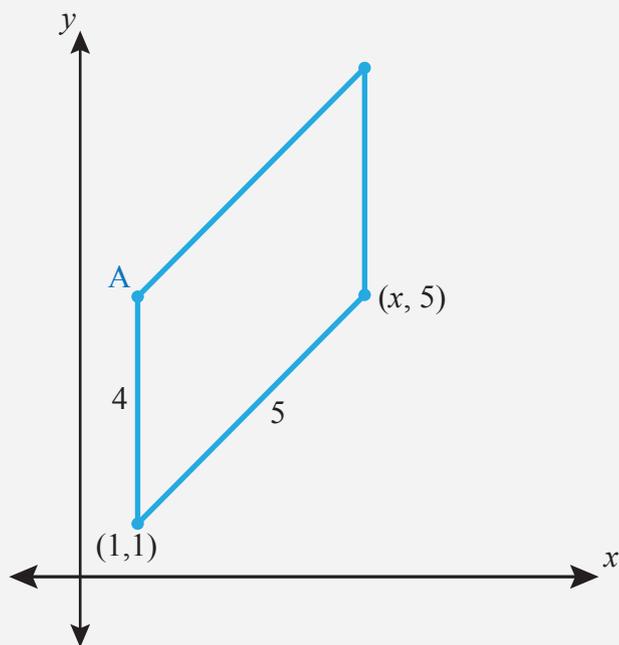
- Incorrect use of circle theorems (especially the Central Angle Theorem) may lead students to assume that x is twice the size of the 58° angle. That is, $x = 116$.

Mathematics Level 5

Measurement and Geometry

Example: Geometry

A parallelogram, with side lengths of 4 and 5, is drawn on a Cartesian plane.



The parallelogram is reflected about the line $y = x - 1$.

What are the coordinates of the vertex A after reflection?

- A (1, -1)
- B (1, -5)
- C (2, 0)
- D (6, 0)

ANSWER D: (6, 0)

Students select option A: as they may use the coordinates given and reflect them about the x axis.

Students select option B: as they may calculate the coordinates for A reflected about the x axis.

Students select option C: as they may use the coordinates given and reflect them about the line $y = x - 1$.

COMMENTARY

Students need to identify the position of the line $y = x - 1$ and use it to determine the coordinates of point A when reflected about the line. They could construct a sketch on paper and use it to approximate the way point A will be transformed as a result of the reflection.

The line $y = x - 1$ has a gradient of 1, which means it crosses the x axis at an angle of 45° . When the vertical line interval from (1,1) to point A is reflected across this line it will be transformed to a horizontal line interval. Students should be able to use this to eliminate the incorrect options.

Mathematics Level 5
Number and Algebra

Example: Number

A family of polynomials is defined by the rules:

$$P_1(x) = x + 1$$

$$P_2(x) = x^2 + 2x + 1$$

$$P_{n+2}(x) = P_{n+1}(x) + (P_n(x))^2 \text{ where } n = 1, 2, 3, \dots$$

$$2P_3(x) + 4P_2(x) = a(x^2 + 2x + 1)$$

What is the value of a ?

- A 2
- B 6
- C 8
- D 10

ANSWER C: 8

Students select option A: as they may calculate using $P_2(x)$ and $P_1(x)$, or they may determine $P_3(x)$ and just use this.

Students select option B: as they may combine the 2 and 4 coefficients, or use $P_3(x)$ twice in their calculation.

Students select option D: as they may use $P_2(x)$ twice in calculation.

COMMENTARY

Students are required to determine the value of an unknown found in a polynomial expression. Students need to use the given rules defining the family of polynomials to determine the next one () in the sequence. They then need to combine this with the previous one () in the sequence to determine the unknown value.

$$\begin{aligned} P_3(x) &= P_2(x) + (P_1(x))^2 \\ &= x^2 + 2x + 1 + (x + 1)^2 \\ &= x^2 + 2x + 1 + x^2 + 2x + 1 \\ &= 2x^2 + 4x + 2 \end{aligned}$$

$$\begin{aligned} 2P_3(x) + 4P_2(x) &= 2(2x^2 + 4x + 2) + 4(x^2 + 2x + 1) \\ &= 4x^2 + 8x + 4 + 4x^2 + 8x + 4 \\ &= 8x^2 + 16x + 8 \\ &= 8(x^2 + 2x + 1) \end{aligned}$$

So, $a = 8$.

Mathematics Level 5
Number and Algebra

Example: Number

A family of polynomials is defined by the rules:

$$P_1(x) = x + 1$$

$$P_2(x) = x^2 + 2x + 1$$

$$P_{n+2}(x) = P_{n+1}(x) + (P_n(x))^2 \text{ where } n = 1, 2, 3, \dots$$

$$2P_3(x) + 4P_2(x) = a(x^2 + 2x + 1)$$

What is the value of $P_4(-1)$?

ANSWER 0

COMMENTARY

Students are required to find an expression for, and then substitute $x = -1$ into, the P_4 polynomial. They need to use the rules for the family of polynomials to determine P_3 and then P_4 . Once P_4 is determined, they can substitute $x = -1$ to calculate the final value.

$$\begin{aligned} P_4(x) &= P_3(x) + (P_2(x))^2 \\ &= 2x^2 + 4x + 2 + (x^2 + 2x + 1)^2 \\ &= 2x^2 + 4x + 2 + (x^2 + 2x + 1)(x^2 + 2x + 1) \\ &= 2x^2 + 4x + 2 + x^4 + 2x^3 + x^2 + 2x^3 + 4x^2 + 2x + x^2 + 2x + 1 \\ &= x^4 + 4x^3 + 8x^2 + 8x + 3 \end{aligned}$$

$$\begin{aligned} P_4(-1) &= (-1)^4 + 4(-1)^3 + 8(-1)^2 + 8(-1) + 3 \\ &= 1 - 4 + 8 - 8 + 3 \\ &= 0 \end{aligned}$$

So, $a = 8$.

Mathematics Level 5
Number and Algebra

Example: Algebra

What is the value of x in the equation

$$\frac{1}{x} - \frac{1}{2x} + \frac{1}{3x} - \frac{1}{4x} + \frac{1}{5x} - \frac{1}{6x} = 1$$

ANSWER $\frac{37}{60}$

COMMENTARY

Students need to determine the value of x that solves the equation. They need to simplify the algebraic fractions by finding a common denominator; in this case $60x$ is the lowest common denominator. Once they combine and simplify the fractions they can then solve for x .

$$\begin{aligned}\frac{1}{x} - \frac{1}{2x} + \frac{1}{3x} - \frac{1}{4x} + \frac{1}{5x} - \frac{1}{6x} &= 1 \\ \frac{60 - 30 + 20 - 15 + 12 - 10}{60x} &= 1 \\ \frac{37}{60x} &= 1 \\ x &= \frac{37}{60}\end{aligned}$$

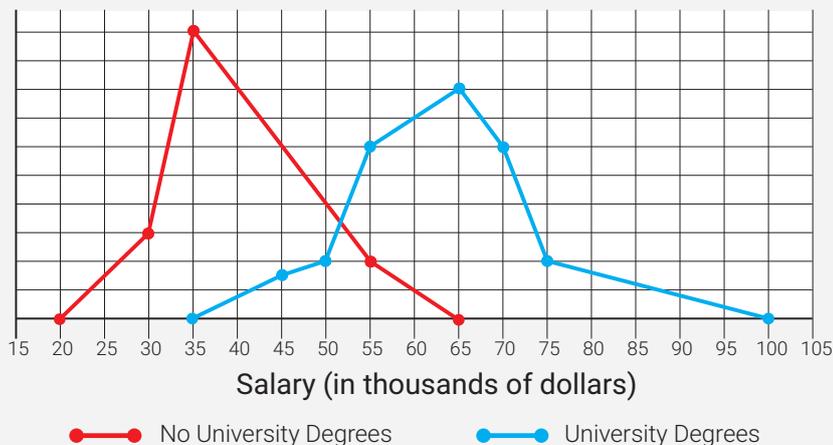
Common errors may include:

- Forgetting the negative signs in the equation and adding all of the terms in the numerator, so getting an answer of $x = \frac{147}{60}$.
- Mistakenly solving for an incorrect common denominator, such as $24x$ which might lead to a solution such as $x = \frac{3}{5}$.

Mathematics Level 5
Statistics and Probability

Example: Probability

Workers with a university degree and workers with no university degree were compared. The graph shows the relative frequencies of the salaries of two equal groups of workers.



At which salary is the probability that a worker has a university degree equal to $\frac{1}{3}$?

- A \$35 000
- B \$45 000
- C \$50 000
- D \$55 000

ANSWER C: \$50 000

Students select option A: as they may identify the high point of No University Degrees, or they may identify \$35 000 as approximately $\frac{1}{3}$ of the highest University salary.

Students select option B: as they may incorrectly use distances from the graph.

Students select option D: as they may identify relative frequency of No University Degrees to be three times the value for University Degrees and mistake this as giving the probability of $\frac{1}{3}$.

COMMENTARY

Students are required to compare the four options to find the one that gives the required probability. They need to be able to determine and use the fact that,

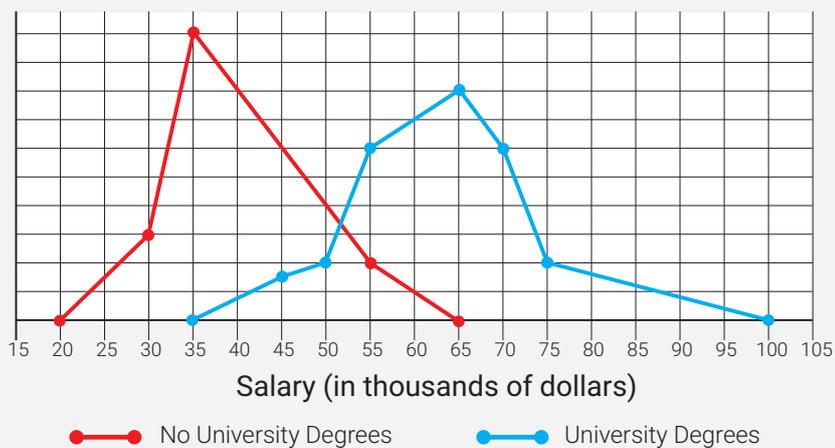
$$\text{Pr (random worker has University degree)} = \frac{\text{number of workers with a University degree}}{\text{total numbers of workers}}$$

The vertical axis (relative frequency) is deliberately without a scale. Students should recognise that values are not required since they are being asked to compare relative positions between the two groups of workers.

Mathematics Level 5
Statistics and Probability

Example: Statistics

Workers with a university degree and workers with no university degree were compared. The graph shows the relative frequencies of the salaries of two equal groups of workers.



What is the probability that a worker with a salary of \$45 000 has a university degree?

- A $\frac{1}{5}$ C $\frac{1}{3}$
 B $\frac{1}{4}$ D $\frac{1}{2}$

ANSWER A: $\frac{1}{5}$

Students select option B: as they may correctly identify relative values of 1.5 and 6 but interpret the probability as $\frac{1.5}{6}$.
 Students select option C: as they may estimate the difference visually to be $\frac{1}{3}$.
 Students select option D: as they may misunderstand how to read the graph and guess.

COMMENTARY

Students are required to use the relative position of the two graphs at the \$45 000 position to identify a probability. They can use the grid lines to locate the University Degree graph at $y = 1.5$ and the No University Degree graph at $y = 6$. The probability can be derived from these values.

$$\text{Pr (random worker has University degree)} = \frac{\text{number of workers with a University degree}}{\text{total numbers of workers}}$$

The number of workers in either group is not known but the relative frequencies can be used in the same way. So,

$$= \frac{1.5}{1.5 + 6}$$

$$\text{Pr (random worker has University degree)} = \frac{1.5}{7.5}$$

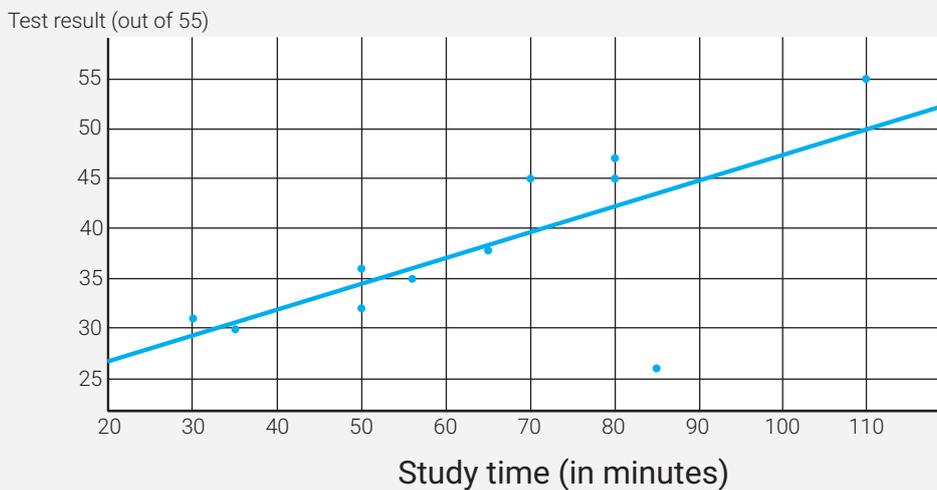
$$= \frac{1}{5}$$

The vertical axis (relative frequency) is deliberately without a scale. Students should recognise that values are **not** required since they are being asked to compare relative positions between the two groups of workers.

Mathematics Level 5
Statistics and Probability

Example: Statistics

11 students recorded the time they spent studying for a particular test. The scatter plot also shows the test score each student received. A regression line has been fitted to the scatter plot.



What is the equation of the regression line?

- A study time = $21.5 + 0.26 \times$ test score
- B test score = $21.5 + 0.26 \times$ study time
- C study time = $26.7 + 0.26 \times$ test score
- D test score = $26.7 + 0.26 \times$ study time

ANSWER B: test score = $21.5 + 0.26 \times$ study time

Students select option A: as they may incorrectly label the variables.

Students select option C: as they may incorrectly label the variables and misread the left axis as the y axis.

Students select option D: as they may misread the left axis as the y axis.

COMMENTARY

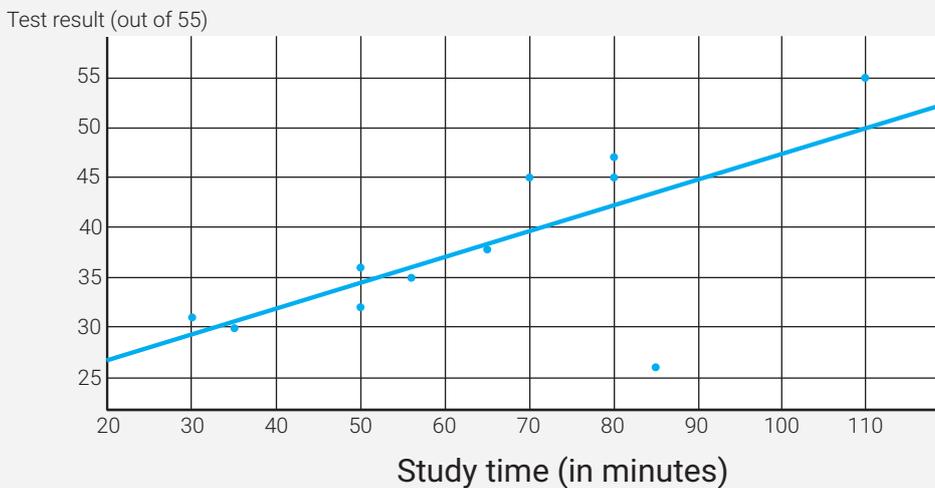
Students need to compare the equations that are given in the options and identify the one that most closely matches the line fitted to the scatter plot. They should note that the vertical axis on the scatterplot is not the y axis.

Students should be able to recognise the x axis (study time) as the independent or explanatory variable, and the y axis (test result) as the dependent or response variable. They could identify two points on the regression line that could be used to determine the gradient, although they can answer the question without needing to do this.

Mathematics Level 5
Statistics and Probability

Example: Statistics

11 students recorded the time they spent studying for a particular test. The scatter plot also shows the test score each student received. A regression line has been fitted to the scatter plot.



The point (85, 26) is recognised as an outlier. The point is removed and a new regression line is fitted to the remaining data.

How will the new regression line compare to the original line?

- A The gradient and y intercept will both increase
- B The gradient and y intercept will both decrease
- C The gradient will increase and the y intercept will decrease
- D The gradient will decrease and the y intercept will increase

ANSWER C: The gradient will increase and the y intercept will decrease

Students select option A: as they may incorrectly identify the effect on the y intercept.

Students select option B: as they may incorrectly identify the effect on the gradient.

Students select option D: as they may interpret the reverse effect on both the gradient and the y intercept.

COMMENTARY

Students need to describe the effect that removing an outlier from the scatterplot will have on the gradient and y intercept of the regression line. They need to understand regression lines as lines of best fit, and visualise the effect that an outlier will have on the idea of 'best fit'.

In this particular example, the removal of the outlier will cause the regression line to steepen as it more closely follows the remaining points.

Reading Level 5

Reflecting on the Text

Reflect on ideas

The following quotes are all concerned with art

- I Art for Art's sake!
- II The perfection of art is to conceal art.
- III Art is the lie that enables us to realize the truth.
- IV The artist is not the transcriber of the world, he is its rival.
- V Art attracts us only by what it reveals of our most secret self.
- VI It's true that things are beautiful when they work. Art is function.

Which of the following quotes suggests that the function of art is to make sense of the world?

- A I
- B III
- C V
- D VI

Answer: B. III

Explanation

The reader needs to interpret a selection of quotations which use similar and fairly simple vocabulary to express subtly different points about art. Readers need to identify and categorise these ideas in their heads while identifying relationships between ideas, some of which are implicit rather than explicit.

Although Quote III (B) suggests that there is something untruthful about art, at the same time it suggests that the fundamental purpose of art is to reveal some truth about the world. Hence B is the correct answer.

Quote I (A) is claiming that there is no purpose to art beyond art itself, which is to say that art has no function at all. If it has no function, then it cannot have the function of making sense of the world. Quote V (C) is consistent with the idea that art has a function but it suggests that its purpose is to reveal something about the viewer rather than something about the world. Quote VI (D) explicitly refers to art having a function of some sort but does not specify the nature of that function. It is not opposed to the idea that art makes sense of the world but it is not asserting it either.

Text complexity

There are several sources of conceptual complexity in individual quotes. The reader needs to recognise Quote I as a slogan expressing a historically important idea about the nature of art. Strong readers need to be able to draw on this sort of basic cultural knowledge. In addition, there are also subtly different conceptions of 'art' at work in different quotes. Quote II is concerned with the idea of art as a process or skill, while other quotes use the word 'art' to refer more to the artwork as a product. In Quotes II and III, the reader needs to construe the paradoxes at work (art should hide art and art as both lie and truth).

Reading Level 5

Interpreting Meaning

Analyse multiple perspectives

The following quotes are all concerned with music.

- I Music, when soft voices die, vibrates in the memory. **Percy Bysshe Shelley**
- II Without music, life would be a mistake. **Friedrich Nietzsche**
- III Where words leave off, music begins. **Heinrich Heine**
- IV Music can name the unnameable and communicate the unknowable. **Leonard Bernstein**
- V The music is not in the notes, but in the silence between. **Wolfgang Amadeus Mozart**

Which of the following quotes is closest in meaning to III?

- A I
- B II
- C IV
- D V

Answer: C. IV

Explanation

The reader needs to interpret a selection of quotations which use similar and fairly simple vocabulary to express subtly different points about music. Readers need to identify and categorise these ideas in their heads while identifying similarities and differences. The reader should begin by identifying the meaning of the quote referred to in the question, i.e., Quote III. It suggests that music begins where words leave off because music can express what words cannot. Now the reader needs to identify which of the remaining options makes a similar point. Quote I (A) is concerned with what happens when music stops rather than what happens when words do. Quote II (B) simply asserts that music is important without saying why. Quote IV (C) claims that music can say what words cannot, which makes this the correct answer. Quote V (D) tells us what music is, rather than what it means.

Text complexity

Despite the relative verbal simplicity of the quotes, complexity arises from the fact that the quotes express (or imply) contrasts that are both distinct and at the same time conceptually similar, namely contrasts between words and music (III and IV), between music and silence (V but also, implicitly I, II and III), between life with and without music (II). Furthermore there are several sources of complexity within individual quotes. Quote I uses poetic language (the metaphor of music vibrating in the memory) and three other quotes (III, V and VI) make somewhat paradoxical claims, all of which require careful thought in order to construe the meaning.

Reading Level 5

Interpreting Meaning

Analyse multiple perspectives

The following quotes are all concerned with music.

- I Music, when soft voices die, vibrates in the memory. **Percy Bysshe Shelley**
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How do quotes III and V relate to one another?

- A They both employ paradox.
- B They both use irony to make their point.
- C They express opposing ideas about music.
- D They apply the same insight to different contexts.

Answer: A. They both employ paradox

Explanation

Readers need to interpret a selection of quotations which use similar (and fairly simple) vocabulary to express subtly different points about music. They need to identify and categorise these ideas in their heads while identifying similarities and differences. Strong readers at this level are expected to have a 'metalanguage' which enables them to identify literary and rhetorical techniques.

Faced with this type of question, the reader needs to look to the options in order to narrow down the kind of relationship referred to in the question. Options (A) and (B) both refer to techniques that the quotes use; (C) and (D) are concerned with the ideas expressed. There are relationships of both kinds so the student needs to identify which applies. Quote III speaks of 'expressing the inexpressible'. This is verbally contradictory and yet makes some sense, i.e. it is paradoxical. Quote V does the same thing twice when it says that music can 'name the unnameable and communicate the unknowable'. Hence (A) is correct. Readers might select (B) if they

share the common misconception of 'irony' as expressing the idea that something is 'surprising' or 'unexpected'. 'Irony' occurs when word or phrase in context means the opposite of its literal meaning. That is not happening here; there is no suggestion that the two quotes are not to be taken at face value.

Text complexity

Despite the relative verbal simplicity of the quotes, complexity arises from the fact that the quotes express (or imply) contrasts that are both distinct and at the same time conceptually similar, namely contrasts between words and music (III and IV), between music and silence (V but also, implicitly I, II and III), between life with and without music (II). Furthermore there are several sources of complexity within individual quotes. Quote I uses poetic language (the metaphor of music vibrating in the memory) and three other quotes (III, V and VI) make somewhat paradoxical claims, all of which require careful thought in order to construe the meaning.

Reading Level 5

Interpreting Meaning

Draw conclusions

This passage is from a novel by Nathaniel Hawthorne, published in 1850.

The founders of a new colony, whatever Utopia of human virtue and happiness they might originally project, have invariably recognised it among their earliest practical necessities to allot a portion of the virgin soil as a cemetery, and another portion as the site of a prison. In accordance with this rule it may safely be assumed that the forefathers of Boston had built the first prison-house somewhere in the vicinity of Cornhill, almost as seasonably as they marked out the first burial-ground, on Isaac Johnson's lot, and round about his grave, which subsequently became the nucleus of all the congregated sepulchres in the old churchyard of King's Chapel. Certain it is that, some fifteen or twenty years after the settlement of the town, the wooden jail was already marked with weather-stains and other indications of age, which gave a yet darker aspect to its beetle-browed and gloomy front. The rust on the ponderous iron-work of its oaken door looked more antique than anything else in the New World. Like all that pertains to crime, it seemed never to have known a youthful era. Before this ugly edifice, and between it and the wheel-track of the street, was a grass-plot, much overgrown with burdock, pig-weed, apple-pern, and such unsightly vegetation, which evidently found something congenial in the soil that had so early borne the black flower of civilised society, a prison. But on one side of the portal, and rooted almost at the threshold, was a wild rose-bush, covered, in this month of June, with its delicate gems, which might be imagined to offer their fragrance and fragile beauty to the prisoner as he went in, and to the condemned criminal as he came forth to his doom, in token that the deep heart of Nature could pity and be kind to him

The use of the word 'Utopia' (line 1) highlights the founders'

- A idealism
- B foresight
- C pragmatism
- D impracticality

Answer: A. idealism

Explanation

Whether the idea of 'Utopia' is familiar or not, the reader needs infer the implications of the word from the context. Hawthorne is drawing a contrast between a Utopia, a place of 'human virtue and happiness', and the more unpleasant realities of community life, namely prisons and cemeteries. At the beginning, the founders are focused on their ideals, captured in the word 'Utopia'. Hence (A) is correct. Later their 'pragmatism' (C) leads them to modify their original ideals, to move away from the ideal, by creating a cemetery and a prison. This 'pragmatism' is not conveyed by the word 'Utopia'. At the same time, having ideals does not necessarily mean that you are impractical (D); after all, Hawthorne asserts that the founders very quickly addressed the 'practical necessities', but he also implies that they did not anticipate them, which would be 'foresight' (B).

Text complexity

The complexity in this text derives from the fact that it is written in a nineteenth century style, which may be unfamiliar, and from the use of unfamiliar words, phrases and syntax. Arguably a sophisticated reader at this level should be familiar with the word 'Utopia'. However, if the reader is not familiar with the word, it is necessary to infer the meaning from its use in this context.

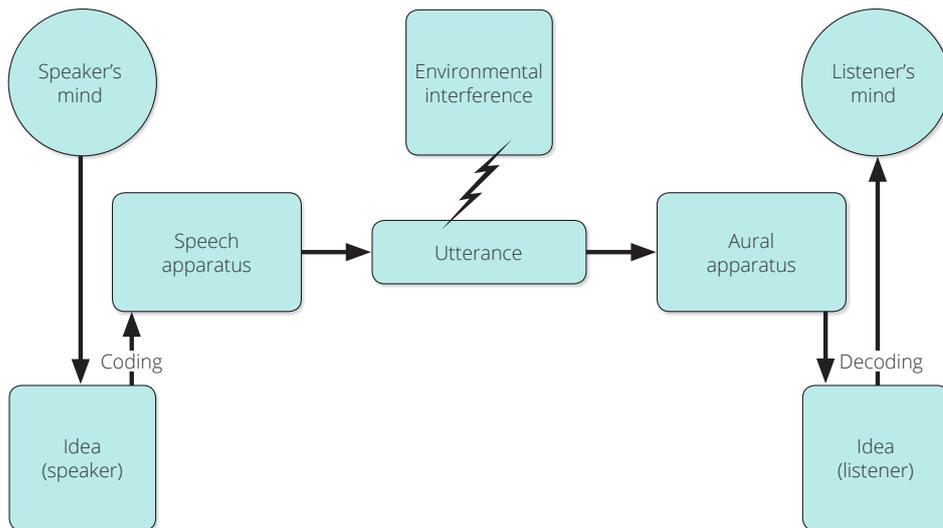
The word 'Utopia' is derived from a very specific source, Thomas More's book of that name published in 1516, and has come to refer to any vision of an ideal society. It is important to note that the essential meaning can be worked out from the context; there is no need to have any knowledge of More's book or the subsequent history of the idea.

Reading Level 5

Interpreting Meaning

Extrapolate ideas

This diagram represents the process of spoken communication



Consider the following scenario in relation to the diagram above.

A person struggles to express herself in words.

This disrupts communication because it

- A** interferes with coding.
- B** interferes with decoding.
- C** is a disruption to the speech apparatus.
- D** is an example of environmental interference.

Answer: A. interferes with coding.

Explanation

This diagram suggests that the formulation of words is a distinct process of the creation of ideas. The process of moving from the idea to its formulation in words is presented as 'coding'. It is this that the person in the scenario struggles with and so (A) is correct. There is no suggestion in the scenario that the speaker has trouble actually forming the sounds comprising her utterance (which would be C) nor is there any suggestion of environmental interference (D). Even if there were such interference, the problem has already occurred before the utterance occurs. For similar reasons, (B) is wrong; decoding is a process that occurs in the listener's head (the right hand side of the diagram) but the problem in the scenario relates to the speaker.

Text complexity

Complexity here depends upon several factors. The diagram breaks an apparently simple everyday process, verbal communication, into a number of components, separating processes or actions that occur simultaneously or nearly so. Readers must consider how the distinctions set forth in the diagram apply in a particular scenario. In addition, the diagram suggests that the formulation of words is a distinct process from the generation of an idea and that understanding is separate from hearing the words spoken. These points are certainly debatable but the reader needs to set such concerns aside and think about the implications of the diagram as presented.

Reading Level 5

Interpreting Meaning

Extrapolate ideas

The following passage comes from the preface to Sylvia Pankhurst's 1911 'The History of the Women's Militant Suffrage Movement: 1905-1910'. The women's suffrage movement was a political movement which sought to secure the right to vote for women. Sylvia Pankhurst - like her mother Emmeline - was one of its leaders.

To many of our contemporaries perhaps the most remarkable feature of the militant movement has been the flinging-aside by thousands of women of the conventional standards that hedge us so closely round in these days for a right that large numbers of men who possess it scarcely value. Of course it was more difficult for the earlier militants to break through the conventionalities than for those who followed, but, as one of those associated with the movement from its inception, I believe that the effort was greater for those who first came forward to stand by the originators than for the little group by whom the first blows were struck. I believe this because I know that the original militants were already in close association with the truth that not only were the deeds of the old time pioneers and martyrs glorious, but that their work still lacks completion, and that it behoves those of us who have grasped an idea for human betterment to endure, if need be, social ostracism, violence, and hardship of all kinds, in order to establish it. Moreover, whilst the originators of the militant tactics let fly their bolt, as it were, from the clear sky, their early associates rallied to their aid in the teeth of all the fierce and bitter opposition that had been raised.

According to the text, those who joined the suffrage movement after its original inception

- A are undeserving of the praise they have received for their actions.
- B demonstrated a level of courage that may be underappreciated by others.
- C understood the injustice that drove the suffrage movement better than the originators.
- D did not properly appreciate the courage and efforts of the originators of the movement.

Answer: B. demonstrated a level of courage that may be underappreciated by others.

Explanation

The reader is first required to relate the passage to the context provided in the introduction so as to orientate themselves to its style and content. They then need to carefully track the competing ideas being presented and extrapolate an implied argument from them. In comparing the efforts of the originators of the suffrage movement with those who joined later, competing and potentially confusing ideas about whose efforts were more courageous are presented, before the writer surprisingly (and humbly) suggests the followers were the braver of the two. It is subtly implied, therefore, that this fact might be underappreciated by others, though this argument is not explicitly made in the text. Thus (D) is correct.

Text complexity

As with many historical texts students may need to read, this passage employs an unfamiliar style and discusses a topic that may also be unfamiliar. It contains several low frequency words (such as 'martyrs', 'behooves' and 'ostracism') but also words and expressions whose use in this context may be confused with other understood meanings ('militants', 'the truth', 'in the teeth'). Every sentence is complex in structure, with multiple sub-clauses that add nuance to meaning and may obscure the main clause. They are thus dense with information, being anywhere from 40 to 70 words in length as a result. In addition, the two main subjects of discussion (the 'originators' and 'early associates') are each referred to in multiple different ways, and the discussion constantly alternates between the two, making it more difficult to separate the information about each.

Reading Level 5

Vocabulary

Distinguish nuance

The following quotes are all concerned with art.

- I Art for Art's sake!
- II The perfection of art is to conceal art.
- III Art is the lie that enables us to realise the truth.
- IV The artist is not the transcriber of the world, he is its rival.
- V Art attracts us only by what it reveals of our most secret self.
- VI It's true that things are beautiful when they work. Art is function.

Which of the following quotes emphasises the role of imagination in art?

- A I
- B III
- C IV
- D V

Answer: C. IV

Explanation

The reader needs to interpret a selection of quotations which use similar and fairly simple vocabulary to express subtly different points about art. Readers need to identify and categorise these ideas in their heads while identifying relationships between ideas, some of which are implicit rather than explicit.

Quote IV (C) suggests that the artist must go beyond reality, which implies going beyond what is perceived to enter the realm of imagination. Other quotes are consistent with the idea that imagination is central to art, they do not challenge the idea, but neither do they emphasize this idea. With respect to Quote III (B), it might be thought that creating 'the lie' involves imagination. This is a fair reading of these words, yet the emphasis of the whole quote is not on this point but on the purpose of art – the realisation of the truth.

Text complexity

There are several sources of conceptual complexity in individual quotes. The reader needs to recognise Quote I as a slogan expressing a historically important idea about the nature of art. Strong readers need to be able to draw on this sort of cultural knowledge. In addition, there are also subtly different conceptions of 'art' at work in different quotes. Quote II is concerned with the idea of art as a process or skill, while other quotes use the word 'art' to refer more to the artwork as a product. In Quotes II and III, the reader needs to construe the paradoxes at work (art should hide art and art as both lie and truth).

Reading Level 5

Vocabulary

Understand key terms

The following quotes are all concerned with music.

- I Music, when soft voices die, vibrates in the memory. **Percy Bysshe Shelley**
- II Without music, life would be a mistake. **Friedrich Nietzsche**
- III Where words leave off, music begins. **Heinrich Heine**
- IV Music can name the unnameable and communicate the unknowable. **Leonard Bernstein**
- V The music is not in the notes, but in the silence between. **Wolfgang Amadeus Mozart**

Quote V is best described as

- A** ironic.
- B** allegorical.
- C** hyperbolic.
- D** metaphorical.

Answer: C. hyperbolic.

Explanation

Readers need to interpret a selection of quotations which use similar and fairly simple vocabulary to express subtly different points about music. They need to identify and categorise these ideas in their heads while identifying similarities and differences. Strong readers at this level are expected to have a 'metalanguage' which enables them to identify and write about literary and rhetorical techniques.

It would be implausible to claim that the notes are completely irrelevant to music. Mozart is overstating his claim to emphasise something he believes to be true. Hence he is employing hyperbole (C). Readers might select (A) if they share the common misconception of 'irony' as expressing the idea that something is 'surprising' or 'unexpected'. 'Irony' occurs when word or phrase in context means the opposite of its literal meaning. That is not happening here; there is no suggestion that Mozart means the opposite of what he says. At the same

time, Mozart is not comparing music with anything else, which is why the quotation is neither allegorical (B) nor metaphorical (D). Readers who believe that any poetic or rhetoric device counts as metaphorical or allegorical might choose either of these options.

Text complexity

Despite the relative verbal simplicity of the quotes, complexity arises from the fact that the quotes express (or imply) contrasts that are both distinct and at the same time conceptually similar, namely contrasts between words and music (III and IV), between music and silence (V but also, implicitly I, II and III), between life with and without music (II). Furthermore there are several sources of complexity within individual quotes. Quote I uses poetic language (the metaphor of music vibrating in the memory) and three other quotes (III, V and VI) make somewhat paradoxical claims, all of which require careful thought in order to construe the meaning.