

Sample Admission Test Paper

Mathematics Section

Question:

If $x + y = 7$ and $xy = 12$, find the value of $x^2 + y^2$.

Answer Choices:

- A) 25
- B) 37
- C) 49
- D) 61

Answer: B) 37

Question:

If a train travels at an average speed of 60 km/h, how long will it take to cover a distance of 360 km?

Answer: 6 hours

Key:

To solve this problem, we can use the formula:

$$\text{Time} = \text{Distance} / \text{Speed}$$

Plugging in the given values: $\text{Time} = 360 \text{ km} / 60 \text{ km/h} = 6 \text{ hours}$

1. Algebra: Solve for x: $2x + 5 = 13$

- a) 2
- b) 3
- c) 4
- d) 5

2. Geometry: The area of a rectangle is 36 square units. If the length is 9 units, what is the width?

- a) 3 units
- b) 4 units
- c) 5 units
- d) 6 units

3. Data Analysis: The mean of the numbers 2, 5, 8, and 11 is:

- a) 4
- b) 6
- c) 8
- d) 10

4. Fractions: What is the sum of $\frac{1}{2}$ and $\frac{1}{4}$?

- a) $\frac{1}{6}$
- b) $\frac{2}{6}$
- c) $\frac{3}{4}$
- d) $\frac{5}{4}$

5. Percentages: What is 20% of 80?

- a) 12
- b) 16
- c) 20
- d) 24

6. Ratio and Proportion: If 3 apples cost \$2, how much would 12 apples cost?

- a) \$6
- b) \$8
- c) \$10
- d) \$12

7. Basic Algebra: Simplify: $3x + 2x - x$

- a) $4x$
- b) $5x$
- c) $6x$
- d) $7x$

8. Geometry: The perimeter of a square with side length 5 cm is:

- a) 10 cm
- b) 15 cm
- c) 20 cm
- d) 25 cm

9. Word Problem: If a car travels at an average speed of 60 mph, how long will it take to travel 300 miles?

- a) 3 hours
- b) 4 hours
- c) 5 hours
- d) 6 hours

English Grammar:

1. Is Jo _____ Chris?*

- a) taller that
- b) taller
- c) as tall as
- d) more tall

2. You aren't allowed to use your mobile so _____.*

- a) it's no point to leave it on
- b) it's no point in leaving it on
- c) there's no point in leaving it on
- d) there's no point to leave it on

3. He told me that he _____ in Spain the previous year.*

- a) has been working
- b) had been working
- c) has worked
- d) had been worked

4. I come _____ England*

- a) From
- b) At
- c) To
- d) Beyond

5. His office is on the second _____ of the building.*

- a) Floor
- b) Level
- c) Ground
- d) Stage

6. _____ to school yesterday?*

- a) Do you walk
- b) Did you walked
- c) Did you walk
- d) Have you walked

7. The doctor gave me a _____ for some medicine yesterday.*

- a) Note
- b) Receipt
- c) Prescription
- d) recipe

8. When Simon _____ back tonight, he'll cook dinner.*

- a) Comes
- b) will come
- c) come
- d) shall come

9. He's interested _____ learning Spanish*

- a) On
- b) To
- c) In
- d) For

10. "Why are you so hungry?" "Oh, I _____ breakfast this morning."*

- a) hadn't
- b) didn't
- c) didn't have
- d) haven't

Comprehension

Read the passage and answer the question based on it.

If a person suddenly encounters any terrible danger, the change of nature one undergoes is equally great. Sometimes fear numbs our senses. Like animals, one stands still, powerless to move a step in fright or to lift a hand in defense of our lives, and sometimes one is seized with panic, and again, act more like the inferior animals than rational beings. On the other hand, frequently in cases of sudden extreme peril, which cannot be escaped by flight, and must be instantly faced, even the most timid men at once as if by miracle, become possessed of the necessary courage, sharp quick apprehension and swift decision. This is a miracle very common in nature. Man and the inferior animals alike, when confronted with almost certain death 'gather resolution from despair' but there can really be no trace of so debilitating a feeling in the person fighting, or prepared to fight for dear life. At such times the mind is clearer than it has ever been; the nerves are steel, there is nothing felt but a wonderful strength and daring. Looking back at certain perilous moments in my own life, I remember them with a kind of joy, not that there was any joyful excitement then, but because they broadened my horizon, lifted me for a time above myself.

1. The title that best suits the passage would be:

- a. The Will to Fight
- b. The Miracle of Confronting Danger
- c. The Change of Nature
- d. Courage and Panic

2. A man may react to sudden danger in three different ways. What are they?

- a. He may flee in panic, or fight back or stand still.
- b. He may be paralyzed with fear, seized with panic or act like an inferior animal.
- c. He may be paralyzed with fear, or seized with panic, or as if by miracle, become possessed of the necessary courage, and face the danger.
- d. He may be paralyzed with fear, run away or fight.

3. What is the meaning of the word debilitating?

- a. enfeeble
- b. strengthen
- c. debase
- d. thriving

4. Explain the phrase 'gather resolution from danger'.

- a. Find peace in times of difficulty.
- b. A state of utter hopelessness makes one determined to face the difficulty
- c. To remain calm and not to lose hope.
- d. To be enthusiastic and brave the odds.

5. The author feels happy in the recollection of dangers faced and overcome because

- a. They brought him a new experience.
- b. They added a new perspective and lifted him above himself for a time.
- c. These experiences boosted his confidence.
- d. He felt elated as he was alive.

Vocabulary:

- 1. The prince abdicated the crown and returned to his castle. Abdicated means...**
 - a) Gave up.
 - b) Sold.
 - c) Reinvested into.
 - d) Auctioned.

- 2. The convicted criminal absconded prior to the sentencing phase of the trial. Absconded means...**
 - a) Touched the jury.
 - b) Reported immediately.
 - c) Left after discussion.
 - d) Departed secretly.

- 3. The aural component of balance is critical for postural control during ambulation. Aural means related to the...**
 - a) Eye.
 - b) Ear.
 - c) Nose.
 - d) Mouth.

- 4. The old man was benevolent with his fortune. Benevolent means...**
 - a) Secretive.
 - b) Stingy.
 - c) Kind.
 - d) Careful.

- 5. The extra dirt was a key buttress to the foundation. Buttress means...**
 - a) Limiting factor.
 - b) Support.
 - c) Overwhelming condition.
 - d) Obstacle.

- 6. The cathode of a battery was removed. Cathode means...**
- a) Positive pole.
 - b) Negative pole.
 - c) Neutral pole.
 - d) Opposite pole.
- 7. The doctor was known as a charlatan over the years of his practice. Charlatan means...**
- a) Quack.
 - b) Knowledgeable physician.
 - c) Procedural physician.
 - d) Medical examiner.
- 8. The wound exhibited signs of copious drainage requiring medical intervention. Copious means...**
- a) Minimal.
 - b) Clear.
 - c) Maximal.
 - d) Foul.
- 9. The attorney accused the witness of defaming the defendant. Defaming means...**
- a) Killing.
 - b) Badgering.
 - c) Suffocating.
 - d) Slandering.
- 10. The detective was able to derive the facts of the case. Derive means...**
- a) Desist.
 - b) Deter.
 - c) Devise.
 - d) Deduce.

Composition

Describe someone who you will never forget and explain why.