



SMART CHALLENGERS

SMART CHALLENGERS' QUESTIONS – APRIL 2024

1. To avoid minor but painful conditions such as blisters or even splits or athlete’s foot (fungal infections), the shoe must allow evaporation of perspiration and must prevent outside dampness from getting in.

The sentence above is presented here in two parts:

“To avoid minor but painful conditions such as blisters or even splits or athlete’s foot (fungal infections),...”(First part
“...the shoe must allow evaporation of perspiration and must prevent outside dampness from getting in.”	Second part

What is the relationship between the first and second parts of the sentence?

The second part

A	Contradicts the first part.
B	Repeats the first part.
C	Illustrates the problem described in the first part.
D	Gives the solution to the problem described in the first part.

2. Read the article and answer the questions that follow.

Parents lack awareness of bullying.

Only one in three parents polled is aware of bullying involving their children, according to an Education Ministry survey released on Wednesday. The survey, conducted between December 1994 and January 1995, involved some 19,000 parents, teachers and children at primary, junior and senior high schools where bullying has occurred.

The survey, the first of its kind conducted by the Ministry, covered students from the fourth grade up. According to the survey, 22 percent of the primary school children

polled said they face bullying, compared with 13 percent of junior high school children and 4 percent of senior high school students.

Asked for the reason behind bullying, about 85 percent of the teachers cited a lack of education at home. Many parents singled out a lack of a sense of justice and compassion among children as the main reason.

An Education Ministry official said the findings suggest that parents and teachers should have closer contact with children to prevent bullying.

School bullying became a major issue in Japan after 13-year-old Kiyoteru Okouchi hanged himself in Nishio, Aichi Prefecture, in the fall of 1994, leaving a note saying that classmates had repeatedly dunked him in a nearby river and extorted money from him.

2 a) How do the statistics provided in the article regarding the prevalence of bullying among primary, junior high, and senior high school students reflect the scope and severity of the issue?

A	They demonstrate the need for greater awareness and action from parents only to address bullying.
B	They showcase the success of community-based initiatives in combating bullying across all school levels.
C	They reveal a disparity in the reporting of bullying incidents between different age groups of students.
D	They underscore the necessity of stricter disciplinary measures to deter bullying behavior in schools.

2b) Why does the article mention the death of Kiyoteru Okouchi ?

A	To give the background to why people are so concerned about bullying in Japan.
B	To highlight the seriousness and impact of school bullying in Japan.
C	To show the urgency of addressing bullying in schools and the need for preventative measures to ensure the safety and well-being of students.
D	All of the above.

4. Fill in the blank with the most suitable word.

The most prevalent of the many -----the doctors saw in the hospital were parasitic and respiratory system infections.

A Grievances

B Afflictions

C Burdens

D Troubles

5. Which sentence is punctuated correctly?

A The prosecutor argued that the defendant who was at the scene of the crime, and had access to the murder weapon, was guilty of homicide.

B The prosecutor argued that the defendant, who was at the scene of the crime, and had access to the murder weapon, was guilty of homicide.

C The prosecutor argued that the defendant, who was at the scene of the crime, and had access to the murder weapon was guilty of homicide.

D The prosecutor argued that the defendant who was at the scene of the crime and had access to the murder weapon was guilty of homicide.

6. Read the letter below about graffiti and answer the question.

I'm simmering with anger as the school wall is cleaned and repainted for the fourth time to get rid of graffiti. Creativity is admirable but people should find ways to express themselves that do not inflict extra costs upon society.

Why do you spoil the reputation of young people by painting graffiti where it's forbidden? Professional artists do not hang their paintings in the streets, do they? Instead, they seek funding and gain fame through legal exhibitions.

In my opinion buildings, fences and park benches are works of art in themselves. It's really pathetic to spoil this architecture with graffiti and what's more, the method destroys the ozone layer. Really, I can't understand why these criminal artists bother as their "artistic works" are just removed from sight over and over again.

Helga

The purpose of the letter is to

A	present an opinion about graffiti.
B	explain what graffiti is.
C	demonstrate the popularity of graffiti.
D	tell people how much is spent removing graffiti

7. "All his enemies were put to the **sword**."

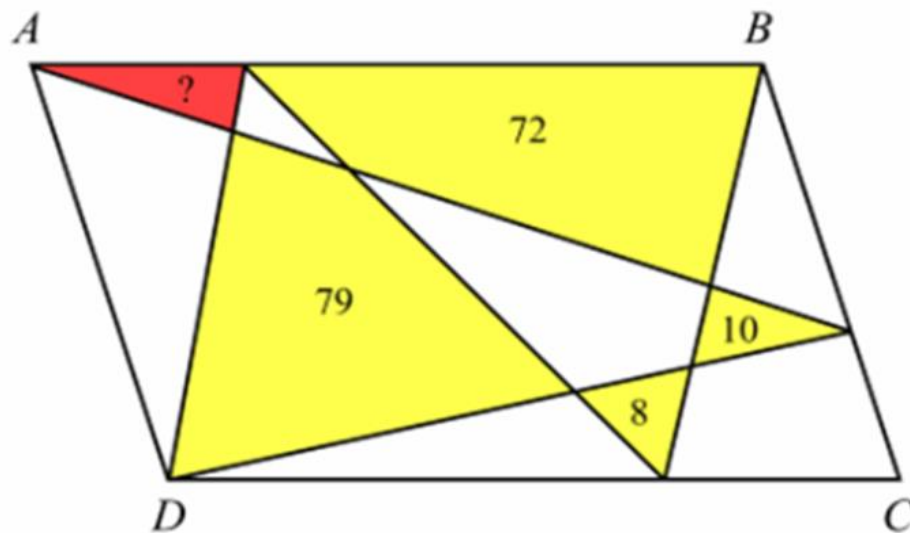
Identify the figure of speech used in the sentence.

A	Metaphor
B	oxymoron
C	synecdoche
D	Euphemism

8.

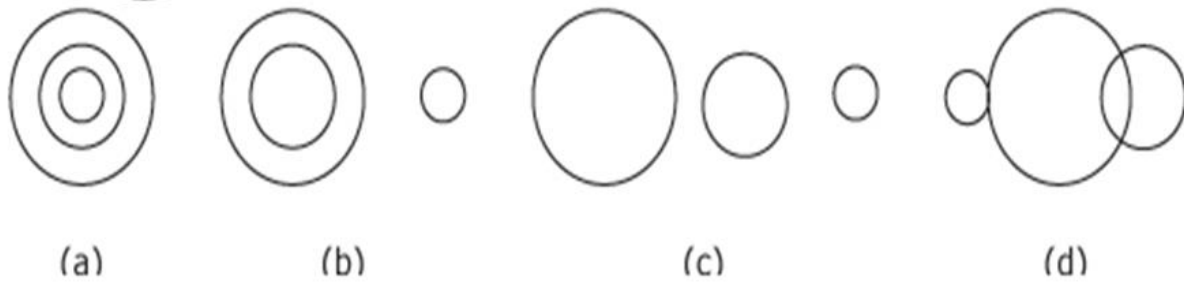
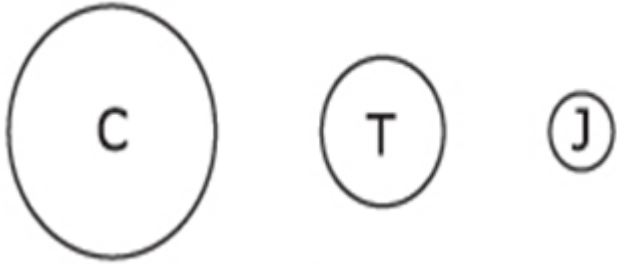
ABCD is a parallelogram. In the diagram, the areas of yellow regions are 8, 10, 72 and 79.

Find the area of the red triangle. The diagram is not to scale.



A	10
B	8
C	9
D	7

9. Which of the following figures best depicts the relationship among criminals, thieves and judges?



A	a
B	b
C	c
D	d

10. At Bruno's Video World, the regular price for a DVD is d dollars. How many DVDs can be purchased for x dollars when the DVDs are on sale at 20%

A	$\frac{5}{4}x$
B	$\frac{4}{5}d$
C	$\frac{4x}{5d}$
D	$\frac{5x}{4d}$

11. If Dave drove one-third of the distance of his trip on the first day, and 60 miles on the second day, he figured out that he still had $\frac{1}{2}$ of the trip to drive. What was the total length, in miles, of his trip?

A	360
B	180

C	420
D	720

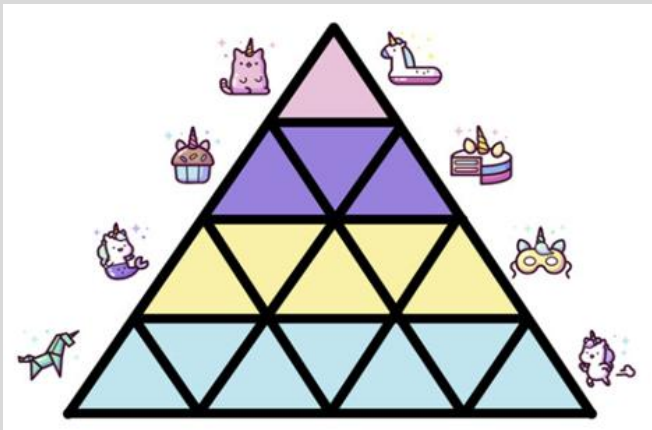
12.

What is the value:

$$\frac{2 + \frac{1}{3 + \frac{1}{4}}}{2 + \frac{1}{3 + \frac{1}{1 + \frac{1}{4}}}}$$

A	1/7
B	3/7
C	1
D	8/7

13. Find the total number of triangles



A	27
B	17
C	35
D	18

14.If a hen and a half lay an egg and a half in a day and a half, how many eggs will half a dozen hens lay in half a dozen days?

A	12
B	24
C	18
D	8

15. The metal which cannot be used for sacrificial rusting although its more reactive than iron

A	Mg
B	Zn
C	Ca
D	Al

16. Which of the following is known as mimicry in organisms?

A	It means species have an appearance (colour,shape or pattern) that helps them to blend with the background.
B	It is an adaptation in which a species uses appearance to copy another species.
C	Both A and B
D	None of the above.

17.A battery of 10 volt carries 20,000 C of charge through a resistance of 20 Ω . The work done in 10 seconds is

A	2×10^3 joule
B	2×10^5 joule
C	2×10^4 joule
D	2×10^2 joule

18. Which of the following best describes a trade bloc?

A	A group of countries that have adopted a common currency.
B	A region where trade is restricted to only certain types of goods.
C	An alliance of countries that cooperate to reduce trade barriers among themselves.
D	A territory where trade is completely prohibited by government regulations.

19. Which one of the following is a political factor that can affect a business?	
A	Taxation
B	Global warming
C	Habitat destruction
D	Part-time workers

20. According to What does the principle of sovereign equality of States entail?	
A	That there are no differences between UN Member States
B	That all UN Member States have equal rights and duties
C	a + b.
D	none of the above

21. Which one of the following is NOT a type of malware?	
A	Virus
B	Worm
C	Spyware
D	Router