

**GRE Practice Paper**  
**Verbal Reasoning**  
**Sentence Equivalence**

**Q1)** He has a reputation for being wooden and \_\_\_\_\_, but I think he comes across as both personable and thoughtful in his ads.

[ Note: Select 2 answer choices ]

- A) portentous
- B) standoffish
- C) blithe
- D) uncongenial
- E) convivial
- F) candid

**Q2)** Yet those plans, based as they were on the age-old formula of security-through-expansion, needed to be balanced against a \_\_\_\_\_ desire to maintain the framework of cooperation with the United States and Great Britain.

[ Note: Select 2 answer choices ]

- A) countervailing
- B) counterpoised
- C) grouching
- D) sybaritic
- E) cloistered
- F) truculent

**Q3)** Across Europe, an estimated 50 millions of the war's survivors had been uprooted by the war, some 16 millions of them \_\_\_\_\_ termed "displaced persons" by the victorious Allies.

[ Note: Select 2 answer choices ]

- A) indecorously
- B) snootily
- C) euphemistically
- D) tenebrously
- E) innocuously
- F) unabashedly

**Reading Comprehension**

**Passage**

[1] An atmospheric gas that absorbs and emits thermal radiation in the infrared range is known as a greenhouse gas. [2] Without such gases, the surface temperature of the earth would have been a frigid  $-18^{\circ}\text{C}$  instead of the current  $15^{\circ}\text{C}$ . [3] Many climate scientists claim that human

activities since the beginning of the Industrial Revolution have led to a steady increase in the atmospheric concentration of many greenhouse gases, with a consequent increase in the planet's surface temperature by about  $0.85^{\circ}\text{C}$  in the last 130 years. [4] However, in order to correctly estimate the anthropogenic changes in earth's surface temperature, it is important to quantify the effect of external natural factors like large volcanic eruptions on the planet's surface temperature.

[5] Though volcanic eruptions emit carbon dioxide, a greenhouse gas, the atmospheric concentration of this gas is about 16000 times the amount released by volcanic eruptions; therefore, no matter how large a volcanic eruption is, it cannot produce a significant change in the atmospheric carbon dioxide levels. [6] Further, the total amount of carbon dioxide emitted per year by volcanic eruptions – between 130 and 230 million tons – is roughly equivalent to that emitted in only three to five days of human activity.

[7] It is mainly through the emission of sulfur dioxide gas and ash particles into the atmosphere that large volcanic eruptions affect earth's surface temperature. [8] Sulfur dioxide reacts with the water vapor present in air to form fine particles called sulfate aerosols. [9] Winds spread the cloud of aerosols and ash particles around the globe in weeks. [10] These particles absorb incoming solar radiation and scatter it back into space, thereby producing a cooling effect on the earth. [11] They take several years to settle out of the atmosphere and thus impact the global surface temperature for many years. [12] Robock and Mao have shown that for two years after a great volcanic eruption, the surface temperature decreases by  $0.1 - 0.2^{\circ}\text{C}$ . [13] The 1991 Pinatubo eruption in Indonesia was one of the largest volcanic eruptions in the twentieth century and resulted in a global surface cooling of  $0.5^{\circ}\text{C}$  for about two to four years after the eruption. [14] The El Chichón eruption in 1982 was the first major eruption whose climatic impact was studied in detail by modern instruments. [15] Though the emission volume of this eruption was similar to the Mount St. Helens eruption in 1980, El Chichón released seven times the amount of sulfate aerosols released by Mount St. Helens and lowered the earth's temperature by about  $0.4^{\circ}\text{C}$  as against a decrease of only  $0.1^{\circ}\text{C}$  for Mount St. Helens.

### **Sub-Question 1 of 8**

**It can be inferred that the highlighted word in the first paragraph is closest in meaning to**

- A) Created over time
- B) Resulting from nature
- C) Produced by humans
- D) Generated in the atmosphere
- E) Industrially manufactured

### **Sub-Question 2 of 8**

**Select a sentence in the passage that, if true, supports the claim that the primary cause of the steady increase in the atmospheric concentration of greenhouse gases is not volcanic eruptions but human activities.**

- A) Sentence 3
- B) Sentence 4
- C) Sentence 6

**Sub-Question 3 of 8**

**From the passage above, which of the following can be most reliably inferred about sulfur dioxide emissions from volcanic eruptions?**

- A) The larger a volcanic eruption, the greater is the amount of sulfur dioxide emitted by it.
- B) The sulfur dioxide emissions from volcanic eruptions lead to a significant change in the atmospheric concentration of this gas.
- C) Large volcanic eruptions emit more sulfur dioxide than carbon dioxide

**Sub-Question 4 of 8**

**If the claims made by the climate scientists about the anthropogenic increase in Earth's surface temperature are correct, the passage best supports which of the following explanations for zero increase in the surface temperature of the earth during a decade in which anthropogenic emissions of greenhouse gases continued to increase?**

- A) Anthropogenic carbon dioxide emissions during this decade were greater than the carbon dioxide emissions from volcanic eruptions.
- B) The amount of sulfate aerosols produced by the volcanic eruptions during this decade was low.
- C) The ash clouds produced by the volcanic eruptions during this decade were dispersed throughout the globe by wind and thus became too spread out to have any impact on the earth's surface temperature.
- D) The cooling effect that resulted from one or more major volcanic eruptions during this decade negated the increase in surface temperature from increased anthropogenic emissions of greenhouse gases.
- E) The impact of the volcanic eruption on the earth's surface temperature was overshadowed by the temperature change resulting from human activity.

**Sub-Question 5 of 8**

**Which of the following statements, if true, will best support the assertion that a large volcanic eruption does not contribute to warming of the earth's surface?**

- A) Volcanic eruptions emit only sulfur dioxide, a gas that does not contribute to warming of the earth's surface.
- B) Only 10 to 40% of the total matter emitted by a volcanic eruption is carbon dioxide.
- C) Being a natural phenomenon, volcanic emissions vary from year-to-year whereas earth's surface temperature has been rising at an accelerating rate.
- D) Increase in earth's surface temperature coincided with a major increase in volcanic eruptions at the end of the last Ice Age.
- E) Warming of the earth's surface is the result of a significant increase in the atmospheric concentration of carbon dioxide.

**Sub-Question 6 of 8**

**With which of the statements about changes in the earth's surface temperature is the author most likely to disagree?**

- A) Each volcanic eruption decreases the surface temperature of the earth by at least 0.1°C.
- B) Volcanic eruptions cannot offer a permanent counterbalance to the anthropogenic changes in the earth's surface temperature.
- C) The earth's climate sometimes takes more than a year to recover from an abrupt external perturbation like a volcanic eruption.
- D) Both anthropogenic and external natural factors affect the earth's surface temperature.
- E) There has been a net increase in earth's surface temperature since the advent of the Industrial Revolution.

**Sub-Question 7 of 8**

**The facts presented in the last paragraph of the passage support which of the following conclusions?**

- A) The carbon content in the volcanic ash particles determines the extent of global surface cooling done by the eruption.
- B) The decrease in earth's surface temperature upon a volcanic eruption is determined by the percentage of sulfur dioxide in the total volcanic emissions.

- C) Sulfate aerosols take longer to settle out of the atmosphere than ash particles.
- D) The sulfate aerosols produced during an eruption have a greater effect on earth's surface temperature than the ash produced during the eruption.
- E) The longevity of a volcanic eruption's impact on earth's surface temperature depends on the amount of sulfur dioxide emitted by it.

**Sub-Question 8 of 8**

**The author's primary purpose in the passage is to**

- A) explain how a particular natural factor impacts a climate metric
- B) suggest an alternative explanation for a temporal change observed in a climate metric
- C) discuss the different natural factors that impact a climate metric
- D) delineate the effects of a natural factor on two climate metrics
- E) disprove a claim about the impact of a particular natural factor on a climate metric

**Text completion**

Directions: For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

**Question 1**

Just as different people can have very different personalities, so too can pets—even those of the same species and breed possess varied \_\_\_\_\_.

initiations
implementations
aptitudes
rationalizations
temperaments

**Question 2**

Frustrated by her husband's lack of \_\_\_\_ (i) \_\_\_\_, Lisa tried to motivate him to \_\_\_\_ (ii) \_\_\_\_ for greater things.

Blank (i)	Blank(ii)
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initiative	mitigate
lassitude	invigorate
eloquence	strive

**Question 3**

At the edges of the universe astronomers have discovered \_\_\_\_ (i) \_\_\_\_ objects called quasars, which have given scientists the /rst direct \_\_\_\_ (ii) \_\_\_\_ of the existence of stars in distant galaxies.

Blank(i)	Blank(ii)
remote	corroboration
paranormal	distortion
viscous	intuition

**Question 4**

If one were asked who transmitted the first radio broadcast of the human voice, one might guess the \_\_\_\_\_ inventor Guglielmo Marconi, but in fact the feat was accomplished by the much less well-known Reginald Fessenden.

infamous
renowned
contingent
cogent
insistent

**Question 5**

The difference in economic terms between a bond and a note is still observed by the United States Treasury, but in other markets the \_\_\_\_ (i) \_\_\_\_ the two terms has become unimportant and the two words are used \_\_\_\_ (ii) \_\_\_\_.

Blank(i)	Blank(ii)
Distinction between	statistically
Similarity of	interchangeably
Usefulness of	differentially

### Question 6

Now known as Administrative Professionals' Day, Secretaries' Day was created in 1952 by Harry F. Klemfuss, a public relations professional who \_\_\_\_\_ the value and significance of administrative assistants in order to attract more women to the profession.

proscribed
touted
refuted
undermined
admonished

## GRE Quantitative Reasoning

### Problem solving

#### Question 1

$y \neq 0$

Quantity A

$$5y^2$$

QuantityB

$$-y^2/7$$

- The quantity in Quantity A is greater.
- The quantity in QuantityB is greater.
- The two quantities are equal.
- The relationship cannot be determined from the information given.

#### Question 2

Quantity A

QuantityB

$$35,043 \times 25,430 \qquad 35,430 \times 25,043$$

- The quantity in Quantity A is greater.
- The quantity in Quantity B is greater.
- The two quantities are equal.
- The relationship cannot be determined from the information given.

### Question 3

Quantity A

Quantity B

The least prime factor of  $7^2$

The least prime factor of  $2^7$

- The quantity in Quantity A is greater.
- The quantity in Quantity B is greater.
- The two quantities are equal.
- The relationship cannot be determined from the information given.

### Question 4

The average (arithmetic mean) of  $a$ ,  $b$ ,  $c$ , and  $d$  is 7.

Quantity A

Quantity B

15

The average (arithmetic mean) of  $4a - 5c$ ,  $b - 24$ ,  $8c - a$ , and  $3d + 2b$

- The quantity in Quantity A is greater.
- The quantity in Quantity B is greater.
- The two quantities are equal.
- The relationship cannot be determined from the information given.

### Question 5

The "hash" of a three-digit integer with three distinct integers is defined as the result of interchanging its units and hundreds digits. The absolute value of the difference between a three-digit integer and its hash must be divisible by

- 9
- 7
- 5
- 4
- 2

### Question 6

Water flows into a 25-liter bucket through a hose and out through a hole in the bottom of the bucket. The rate of flow through the hose is 1 liter per minute. If the bucket is filled to capacity in 40 minutes, at what rate, in liters per minute, was water flowing out of the bucket through the hole?

- $\frac{3}{8}$
- $\frac{1}{4}$
- $\frac{5}{8}$



- 8/5
- 13/8

**Question 7**

A pair of dice is tossed twice. What is the probability that the first toss gives a total of either 7 or 11 and the second toss gives a total of 7 ?

- 1/27
- 1/18
- 1/9
- 1/6
- 7/18

**Question 8**

A photocopier can copy  $r$  pages per hour. How many pages can it copy in  $s$  seconds?

- $3,600rs$
- $rs/60$
- $r/60s$
- $rs/3,600$

**Question 9**

Quantity A

The average (arithmetic mean) cost per hinge for 16 hinges that cost a total of  $2p$  cents

Quantity B

The average (arithmetic mean) cost per hinge for 4 hinges that cost a total of  $p/2$  cents

- Quantity A is greater.
- Quantity B is greater.
- The two quantities are equal.
- The relationship cannot be determined from the information given.

**Question 10**

There are 32 students in Jamie's eighth-grade class. Each student took a 50-point test; the class average (arithmetic mean) was 82% correct. The teacher has assigned one 4-point, extra-credit question. How many students will need to answer the extra-credit question correctly in order to bring the class average to 86% correct?

- 15
- 16
- 17
- All of the students
- It will not be possible for the class to reach an average of 86% correct