

# SOUTH CAROLINA MILITARY ACADEMY

## QUESTIONS FOR EXAMINATION

AUGUST 29, 1882

### HISTORY

**1. From what place did Columbus sail on his first voyage to the New World?**

Columbus set sail from the Spanish port of Palos on his first voyage to the New World.

**2. Where and when was the first permanent English settlement made in North America?**

The first permanent English settlement in North America was established at Jamestown, Virginia in 1607.

**3. After whom was Carolina named?**

Carolina was named for King Charles I and King Charles II of England. The name 'Carolina' originated from the Latin word for Charles - 'Carolus'.

**4. Who wrote the Declaration of Independence?**

The document was drafted by a committee made up of John Adams, Benjamin Franklin, Thomas Jefferson, Roger Sherman, and Robert Livingston. Jefferson, recognized for his ability with words, wrote the first draft; then it was edited by the others, and then edited again by the whole Congress. Fifty-six members of Congress signed it (one of them as late as November).

**5. Name the British and American Commanders at the Battle of Cowpens.**

British: Lt. Col. Banastre Tarleton    American: General Daniel Morgan

**6. What was the date of the surrender at Yorktown?**

October 19, 1781

**7. What President died one month after his election?**

William Henry Harrison died of pneumonia a month after giving the longest inauguration speech on record.

(Pneumonia was the diagnosis in 1841, however, a medical analysis made in 2014, based on the attending physician's notes and records of the White House water supply being downstream of public sewage, concluded that Harrison likely died of septic shock due to Typhoid fever. (McHugh, Jane; Mackowiak, Philip A. (March 31, 2014). "What Really Killed William Henry Harrison?". The New York Times. Retrieved November 27, 2018.)

**8. What South Carolinian was once Vice President of the United States?**

John C. Calhoun

**9. Name the “Original Thirteen States.”**

1. Delaware (ratified the Constitution on December 7, 1787)
2. Pennsylvania (ratified the Constitution on December 12, 1787)
3. New Jersey (ratified the Constitution on December 18, 1787)
4. Georgia (ratified the Constitution on January 2, 1788)
5. Connecticut (ratified the Constitution on January 9, 1788)
6. Massachusetts (ratified the Constitution on February 6, 1788)
7. Maryland (ratified the Constitution on April 28, 1788)
8. South Carolina (ratified the Constitution on May 23, 1788)
9. New Hampshire (ratified the Constitution on June 21, 1788)
10. Virginia (ratified the Constitution on June 25, 1788)
11. New York (ratified the Constitution on July 26, 1788)
12. North Carolina (ratified the Constitution on November 21, 1789)
13. Rhode Island (ratified the Constitution on May 29, 1790)

**10. What State first seceded from the Union, and what was the date of her secession?**

South Carolina seceded on December 20, 1860.

## **GEOGRAPHY**

### **1. In what direction does the earth turn?**

The earth rotates eastward, in prograde motion.

### **2. Into how many equal parts is every circle divided?**

A diameter divides the circle into two equal parts. Each part is called a semicircle. If a radius is drawn cutting a semicircle into two equal parts, then part is called a quadrant. Any two radii divide the circle into two pieces.

### **3. What is the Equator?**

An imaginary line drawn around the earth equally distant from both poles, dividing the earth into northern and southern hemispheres and constituting the parallel of latitude  $0^\circ$ .

### **4. Name the Zones in order, beginning at the North.**

The North frigid zone, between the Arctic Circle  $66.5^\circ$  N and the North Pole  $90^\circ$  N.

The North temperate zone, between the Tropic of Cancer  $23.5^\circ$  N. in the Arctic Circle  $66.5^\circ$  N.

The torrid zone, between the Tropic of Cancer  $23.5^\circ$  N and the Tropic of Capricorn  $23^\circ .5^\circ$  S.

The South temperate zone, between the Tropic of Capricorn  $23.5^\circ$  S and the Antarctic Circle  $66.5^\circ$  S.

The South frigid zone, from Antarctic Circle  $66.5^\circ$  S and the South Pole  $90^\circ$  S.

### **5. What is the longest river in the Western Hemisphere?**

The Amazon is the longest river in the Western Hemisphere.

### **6. Bound South Carolina**

North Carolina, Georgia, Atlantic Ocean

### **7. Mention the States in the United States which border the Atlantic.**

Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida.

**8. What two islands chiefly compose the British Isles?**

Great Britain and Ireland. There are numerous smaller islands and island groups, including the Hebrides, the Shetland Islands, the Orkney Islands, the Isles of Scilly, and the Isle of Man.

**9. Where is the Delta of the Nile?**

Egypt

**10. What is the longest river in the world, and where is it? What is the highest mountain in the world and where is it?**

The Nile is the longest river in the world and is in Egypt.\*

The highest mountain in the world is Mount Everest and is in Tibet.

\*In 1882 the Nile was believed to be the longest river in the world, however, the Amazon has since been determined to be the longest.

## GRAMMAR

### 1. Define a vowel; a syllable.

A vowel is a sound produced when the mouth passage is left so open as not to cause audible friction, and voiced breath is sent through it. The letters A, E, I, O, and U represent vowels.

A syllable is a unit of pronunciation having one vowel sound, with or without surrounding consonants, forming the whole or a part of a word; for example, there are two syllables in cadet and three in citadel.

### 2. Define etymology; syntax.

Etymology is the study of words, their origins and the way in which their meanings have changed throughout history.

Syntax is the set of rules, principles, and processes that govern the arrangement of words and phrases to create well-formed sentences in a given language.

### 3. Define an adjective; a verb.

An adjective is a word or phrase naming an attribute, added to or grammatically related to a noun to modify or describe it.

A verb is a word used to describe an action, state, or occurrence, and forming the main part of the predicate of a sentence.

### 4. Compare the adjectives “bad” and “fore.”

Bad, worse, worst

Fore, former, foremost

### 5. How are verbs divided with respect to their form? How with respect to their meaning?

The five basic forms of verbs are the root, the infinitive, the past, the present participle, and the past participle.

Verbs may be divided into three types with respect to their meaning. These three types are: Action verbs, which show action either physical or mental; Verbs of being which show a state of existence; Linking verbs which link a subject with its compliment.

**6. Give the three principle parts of the verbs “see” and “lay.”**

See, Saw, Seen.

Lay, Laid, Laid.

**7. Decline the pronouns “I” and “it.”**

I, me, mine

It, it, its.

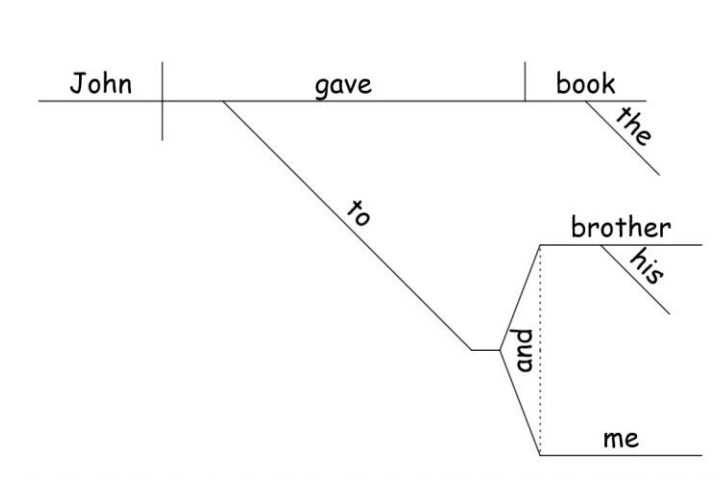
**8. Define a regular verb.**

Regular verbs are those whose past tense and past participle are formed by adding a -d or an -e d to the end of the verb.

**9. What is the predicate of a sentence?**

The predicate of a sentence is that part that tells us what the subject does or is.

**10. Parse “John gave the book to his brother and me.”**



## ARITHMETIC

*[Answers to problems will not be considered unless accompanied by the work]*

### 1. What is an odd number?

An odd number is an integer which is not a multiple of two; A number that when divided by two, leaves a remainder. If it is divided by two the result is a fraction.

### 2. Define a proper fraction; improper fraction; mixed number.

A proper fraction is a fraction that is less than one, with the numerator less than the denominator.

An improper fraction is a fraction in which the numerator is greater than the denominator.

A mixed number is a number consisting of an integer and a proper fraction.

### 3. Add $51\frac{1}{4}$ , $36\frac{5}{8}$ , $42\frac{2}{3}$ , $39\frac{7}{16}$ , and $51\frac{1}{4}$

1. Convert a mixed number to an improper fraction:  $36\frac{5}{8} = 36\frac{5}{8} = 36 \cdot 8 + \frac{5}{8} = \frac{293}{8}$

2. Convert a mixed number to an improper fraction:  $42\frac{2}{3} = 42\frac{2}{3} = 42 \cdot 3 + \frac{2}{3} = \frac{128}{3}$

3. Add  $\frac{293}{8} + \frac{128}{3} = 293 \cdot \frac{3}{8} \cdot 3 + 128 \cdot \frac{8}{3} \cdot 8 = \frac{879}{24} + \frac{1024}{24} = 879 + \frac{1024}{24} = \frac{1903}{24}$

The common denominator calculated as the least common multiple of the both denominators - LCM (8, 3) =  $2^3 \times 3 = 24$

4. Convert a mixed number to an improper fraction:  $39\frac{7}{16} = 39 \cdot 16 + 7/16 = 631/16$

5. Add  $\frac{1903}{24} + \frac{631}{16} = 1903 \cdot \frac{2}{24} \cdot 2 + 631 \cdot \frac{3}{16} \cdot 3 = \frac{3806}{48} + \frac{1893}{48} = 3806 + \frac{1893}{48} = \frac{5699}{48}$

The common denominator calculated as the least common multiple of the both denominators - LCM (24, 16) = 48

6. Convert a mixed number to an improper fraction:  $51\frac{1}{4} = 51\frac{1}{4} = 51 \cdot 4 + \frac{1}{4} = \frac{205}{4}$

7. Add  $\frac{5699}{48} + \frac{205}{4} = \frac{5699}{48} + 205 \cdot \frac{12}{4} \cdot 12 = \frac{5699}{48} + \frac{2460}{48} = 5699 + \frac{2460}{48} = \frac{8159}{48}$

The common denominator you can calculate as the least common multiple of the both denominators - LCM (48, 4) = 48

8. Convert improper fraction to a mixed number.  $\frac{8159}{48} = 169\frac{47}{48}$

$$36\frac{5}{8} + 42\frac{2}{3} + 39\frac{7}{16} + 51\frac{1}{4} = \frac{8159}{48} = 169\frac{47}{48}$$

**4. Solve:**  $1\frac{1}{3} + \frac{1}{2} \times \frac{1}{3} - 6\frac{1}{7} \div \frac{9}{7}$

1. Multiply:  $\frac{1}{2} \times \frac{1}{3} = 1 \times \frac{1}{2} \times 3 = \frac{1}{6}$

Multiply both numerators and denominators. Result fraction keep to lowest possible denominator GCD (1, 6) = 1

2. Convert a mixed number to an improper fraction:  $1\frac{1}{3} = 1 \cdot 3 + \frac{1}{3} = \frac{4}{3}$

3. Add  $\frac{4}{3} + \frac{1}{6} = 4 \times \frac{2}{3} \times 2 + \frac{1}{6} = \frac{8}{6} + \frac{1}{6} = 8 + \frac{1}{6} = \frac{9}{6} = \frac{3}{2}$

The common denominator calculated as the least common multiple of both denominators - LCM (3, 6) = 6

4. Convert a mixed number to an improper fraction:  $6\frac{1}{7} = 6 \times 7 + \frac{1}{7} = \frac{43}{7}$

5. Divide:  $\frac{43}{7} : \frac{9}{7} = \frac{43}{7} \cdot \frac{7}{9} = 43 \cdot \frac{7}{7} \cdot 9 = \frac{301}{63} = \frac{43}{9}$

To divide one fraction by another, invert (turn upside-down) the second fraction, then multiply.

6. Subtract:  $\frac{3}{2} - \frac{43}{9} = 3 \times \frac{9}{2} \times 9 - 43 \times \frac{2}{9} \times 2 = \frac{27}{18} - \frac{86}{18} = 27 - \frac{86}{18} = -\frac{59}{18} = -3\frac{5}{8}$

The common denominator calculated as the least common multiple of the both denominators - LCM (2, 9) = 18.

$$\frac{1}{3} + \frac{1}{2} \times \frac{1}{3} - 6\frac{1}{7} \div \frac{9}{7} = -\frac{58}{18} = -3\frac{5}{18}$$

**5. What is the denominator of a decimal?**

A fraction where the denominator is a power of ten

**6. Express by figures according to decimal notation, four million seven hundred and thirty-five thousand nine hundred and one hundred millionths.**

0.04735901



7. Multiply twenty-three hundredths by nine millionths.

$$\frac{23}{100} \times \frac{9}{1000000} = \frac{207}{100000000} = 0.00000207$$

8. Divide fourteen thousand two hundred and seventy-four millionths by sixty-one thousandths.

$$.0061 \overline{).0014274} \quad .0234$$

9. Reduce 3 miles 1 furlong 17 rods 2 yards 1 foot 8 inches to inches

$$1 \text{ foot} = 12 \text{ inches}$$

$$1 \text{ yard} = 3 \text{ feet} = 36 \text{ inches} \times 2 = 72 \text{ inches}$$

$$1 \text{ rod} = 5.5 \text{ yards} = 16.5 \text{ feet} = 198 \text{ inches} \times 17 = 3,366 \text{ inches}$$

$$1 \text{ chain} = 4 \text{ rods or } 66 \text{ feet} = 792 \text{ inches}$$

$$1 \text{ furlong} = 10 \text{ chains} = 10 \times 792 \text{ inches} = 7,920 \text{ inches}$$

$$1 \text{ miles} = 8 \text{ furlongs} = 8 \times 7,920 \text{ inches} = 63,360 \text{ inches}$$

$$3 \text{ miles, } 1 \text{ furlong, } 17 \text{ rods, } 2 \text{ yards, } 1 \text{ foot } 8 \text{ inches} = 201,458 \text{ inches.}$$

10. If 8 men mow 40 acres of grass in 3 days, how many acres will 9 men mow in 4 days.

$$40 \text{ acres} \div 3 \text{ days} = 13.33 \text{ Acres per day}$$

$$13.33 \text{ acres per day} \div 8 \text{ men} = 1.66 \text{ Acres per man per day}$$

$$1.66 \text{ acres per day} \times 9 \text{ men} = 15 \text{ Acres per day per man}$$

$$15 \text{ acres per day} \times 4 \text{ days} = 60 \text{ Acres}$$

## **SPELLING**

Correct any errors which occur in the following words: 1. Acknowledgment; 2. Referred; 3. Changeable; 4. Battalion; 5. Beleiving; 6. Separation; 7. Nonsense; 8. Reccommend; 9. Benefitted; 10. Misellaneous

2. Referred

4. Battalion

5. Believing

8. Recommended

10. Miscellaneous