

Computerized Placement Testing

Name _____

ACCUPLACER/CPTs

ATTENTION STUDENTS

Prior to taking any or all parts of the Computerized Placement Tests (ACCUPLACER/CPTs), you must submit your application to the

Admissions Office,
Room 123 (1st Floor),
Allman Center,
Main Campus.

Program of study:

ACCUPLACER/CPTs
Sections:

- R
- SS
- A
- ALG

The Testing Center

Room 133 (1st Floor), Allman Center, Main Campus
(336) 734-7324

Walk-In Placement Testing

Monday - Thursday 8 a.m. - 5:30 p.m.

Friday 8 a.m. - noon

(The Testing Center closes at 7 p.m. Monday through Thursday and 3 p.m. Friday.)

Testing is also available by appointment at the Mazie Woodruff Center (336) 734-7950 and the Grady Swisher Center (336) 734-7903.

EDUCATION THAT WORKS
ForsythTech
COMMUNITY COLLEGE

NOTE: If Forsyth Tech is closed because of inclement weather, no test will be given on that date.

www.forsythtech.edu • admissions@forsythtech.edu

SAT or ACT Score Substitution

SAT and ACT scores, which are five years old or less, are usable for placement purposes for all programs of study. You may bring SAT or ACT scores to the Admissions Office, or include them as part of your high school transcript. A counselor in the Admissions Office will use these scores to place you in appropriate courses.

If you have questions concerning testing at Forsyth Tech, call (336) 734-7324.

The Purpose

The Computerized Placement Tests (ACCUPLACER/CPTs) were developed by the College Board and Educational Testing Services to provide information about your reading, English, and mathematics skill levels. These skills are required for success at Forsyth Tech. By assessing your ability levels in these areas, we can determine which of our reading, English, and mathematics courses are most appropriate for you.

The Types of Tests

Four tests are available: the **reading comprehension** test measures your ability to understand what you read. The **sentence skills** test measures your understanding of how sentences are put together and what makes a sentence complete. The two mathematics tests are **arithmetic and elementary algebra**. All four tests consist of multiple-choice questions.

Test Administration

The tests are administered on a personal computer. You will read the instructions and questions on the computer screen. Then you will mark your answers using the computer keyboard. You will have scratch paper for working mathematical problems. Relax! The testing format is very simple.

Score Reporting

When you have completed all the tests, you will receive a printed report and information about your scores.

ACCUPLACER/CPTs Tips

The ACCUPLACER/CPTs have tests on **reading comprehension** (20 questions), **sentence skills** (20 questions), **arithmetic** (17 questions), and **elementary algebra** (12 questions). The tests you take will depend on which program of study you plan to enter. If you have any

questions, ask your admissions counselor, advisor or the Testing Center personnel.

Here are some tips for taking the ACCUPLACER/CPTs.

- ◆ **Most Important:** All the tests are **untimed** so make sure you don't rush. Take all the time you need to answer the questions.
- ◆ Read each question very carefully to make sure you understand what it's asking.
- ◆ Read all choices for answers before selecting one.
- ◆ When having trouble, eliminate as many choices as possible.
- ◆ On the **reading comprehension** test, read the passage as many times as you need.
- ◆ On the **sentence skills** test, put your answer back into the whole sentence to see if the sentence then sounds smooth and logical.
- ◆ On the **arithmetic and elementary algebra** tests, try putting your answer back into the original problem.
- ◆ You cannot go back to previous questions so make sure you're satisfied with the answers you choose.

When and Where the Tests are Given

The tests are given in the Testing Center, Room 133 (1st Floor), Allman Center, Main Campus, Monday through Friday. Be sure to bring a photo ID. Pencils and paper will be provided.

You will need approximately one and one half hours to take the tests.

Test day is an important day in your life. Be prepared by getting adequate rest before the test.

Special Arrangements for Students with Disabilities

If you have a disability (permanent or temporary) that will affect your taking the tests under standard conditions, you should inform the director of Testing at (336) 734-7248. Reasonable accommodations will be provided with appropriate documentation.

Test Regulations

Textbooks, notebooks, dictionaries, calculators, or other

papers of any kind are not allowed in the testing room. Other students will be testing at the same time, and you may not talk to one another for any reason. Talking with anyone other than the test administrator may result in cancellation of your scores. (Because each test taker will have a different test, it is unlikely that anyone can help anyone else.) Following the test period, all paper and pencils will be collected. Carry nothing away with you.

Confidentiality

Your test scores and the information you provide when taking the tests will be used by Forsyth Tech for counseling and placement purposes. It may also be used by Forsyth Tech and the College Board and Educational Testing Services for research purposes. If the data are used for research purposes, special precautions will be taken to ensure that your identity is kept confidential. If you have any questions about the confidentiality of the data you have provided, speak with the test administrator.

Computerized Adaptive Testing Computer-Delivered Testing

The ACCUPLACER/CPTs use testing techniques adapted to individual test takers. You will take the tests using a personal computer. You will use the computer keyboard to enter your answers to the questions and to supply other information. A monitor connected to the computer will allow you to see instructions, questions, multiple-choice options, your responses, and other information presented to you. The test instructions are easy to understand. Entering information is easy. The test administrator can resolve any difficulties that may occur.

Adaptive Testing

We have found that each test usually takes students 15 to 20 minutes to complete. However, **you may take as long as you need to complete a test.** The tests are untimed. Each test is designed using adaptive techniques. This means that the computer automatically decides which questions are presented to you based upon your responses to prior questions. This technique “zeros-in” on just the right questions to ask you without being too easy or too difficult. The greater your demonstrated skill level, the more challenging the questions that will be presented to you.

Guessing

This test adapts to your knowledge. Questions are chosen for you on the basis of your answers to previous questions. Because the test works this way, you must answer every question when it is first given. **You cannot skip any question or come back later to change an answer.**

You may change your answer on a particular question only

before continuing on to the next question. Once you enter your response, the answer is accepted. You cannot return to the question.

If you do not know the answer to a question, try to eliminate one or more of the choices that do not seem reasonable; then select one that remains.

Reading Comprehension

The **reading comprehension** test is designed to measure how well you are able to understand what you read. It contains 20 questions. Some questions involve sentence relationship in which you must choose how two sentences are related. Other questions refer to reading passages of various lengths. Some passages are 75 words or less, while others are longer.

Sentence Skills

Two kinds of questions are given in the **sentence skills** test. Sentence correction questions ask you to choose a word or a phrase to substitute for an underlined portion of a sentence. Construction shift questions ask that a sentence be rewritten in a specific way without changing the meaning. A broad variety of topics is included here. You will be presented a total of 20 questions.

Arithmetic

The **arithmetic** test measures your abilities in three primary categories. The first is operations with whole numbers and fractions. The second category involves operations with decimals and percents. The last category involves applications and problem solving. Seventeen questions are presented in this section.

Elementary Algebra

There are also three categories in the **elementary algebra** test. First, operations with integers and rational numbers include computation with integers and negative rationals, the use of absolute values, and ordering. The second category is operations with algebraic expressions. This tests your abilities in the evaluation of simple formulas and expressions as well as adding and subtracting monomials and polynomials. Both categories include questions about multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring. The third category tests abilities in equation solving, inequalities, and word problems. These questions include solving systems of linear equations, solving quadratic equations by factoring, solving verbal problems presented in algebraic context, geometric reasoning, translating written phrases into algebraic expressions, and graphing. Twelve questions are presented in this section.

Sample Questions for Reading Comprehension

Narrative Questions

Read the statement or passage and then choose the best answer to the question. Answer the question based on what is stated or implied in the statement or passage. The answers are on page 14.

1. Myths are stories, the products of fertile imagination, sometimes simple, often containing profound truths. They are not meant to be taken too literally. Details may sometimes appear childish, but most myths express a culture's most serious beliefs about human beings, eternity, and God.

The main idea of this passage is that myths

- A. are created primarily to entertain young children.
 - B. are purposely written for the reader who lacks imagination.
 - C. provide the reader with a means of escape from reality.
 - D. illustrate the values that are considered important to a society.
2. In the words of Thomas DeQuincey, "It is notorious that the memory strengthens as you lay burdens upon it." If, like most people, you have trouble recalling the names of those you have just met, try this: the next time you are introduced, plan to remember the names. Say to yourself, "I'll listen carefully; I'll repeat each person's name to be sure I've got it, and I will remember." You'll discover how effective this technique is and probably recall those names for the rest of your life.

The main idea of the paragraph maintains that the memory

- A. always operates at peak efficiency.
 - B. breaks down under great strain.
 - C. improves if it is used often.
 - D. becomes unreliable if it tires.
3. The ultimate source of energy for all plants and animals is sunlight. But the sun's energy can be harnessed by plants, through photosynthesis, and stored in molecules of carbohydrates. When animals eat these enzymes, large amounts of energy become available. Animals immediately convert this energy into molecules of high-energy ATP (adenosine triphosphate) - the universal currency of energy in living things. Excluding only the very first stages in carbohydrate breakdown, which are called glycolysis, the entire complicated process of energy transfer to ATP takes place within the mitochondria.

Glycolysis refers to

- A. the initial stages of carbohydrate breakdown.

- B. the process of plants producing oxygen and carbohydrates.
- C. the production of ATP.
- D. the production of body heat which occurs in the mitochondria.

4. Unemployment was the overriding fact of life when Franklin D. Roosevelt became President of the United States on March 4, 1933. An anomaly of the time was that the government did not systematically collect statistics of joblessness; actually it did not start doing so until 1940. The Bureau of Labor Statistics later estimated that 12,830,000 persons were out of work in 1933, about one-fourth of a civilian labor force of over fifty-one million.

Roosevelt signed the Federal Emergency Relief Act on May 12, 1933. The President selected Harry L. Hopkins, who headed the New York relief program, to run FERA. A gifted administrator, Hopkins quickly put the program into high gear. He gathered a small staff in Washington and brought the state relief organizations into the FERA system. While the agency tried to provide all the necessities, food came first. City dwellers usually got an allowance for fuel, and rent for one month was provided in case of eviction. FERA paid for medicine, some doctor bills, but no hospital costs, work-relief, sewing rooms, and renovated hand-me-down clothing.

This passage is primarily about

- A. unemployment in the 1930s.
 - B. the effect of unemployment on United States families.
 - C. President Franklin D. Roosevelt's presidency.
 - D. President Roosevelt's FERA program.
5. It is said that a smile is universally understood. And nothing triggers a smile more universally than a taste of sugar. Nearly everyone loves sugar. Infant studies indicate that humans are born with an innate love of sweets. Based on statistics, a lot of people in Great Britain must be smiling, because on average, every man, woman and child in that country consumes ninety-five pounds of sugar each year.

From this passage it seems safe to conclude that the English

- A. do not know that too much sugar is unhealthy.
 - B. eat desserts at every meal.
 - C. are fonder of sweets than most people.
 - D. have more cavities than any other people.
6. With varying success, many women around the world today struggle for equal rights. Historically, women have achieved greater equality with men during periods of social adversity. Three of the following factors initiated the greatest number of improvements for women: violent revolution, world war, or the rigors of pioneering in an undeveloped land. In all three cases,

the essential element that improved the status of women was a shortage of men, which required women to perform many of society's vital tasks.

We can conclude from the information in this passage that

- A. women today are highly successful in winning equal rights.
 - B. only pioneer women have been considered equal to men.
 - C. historically, women have only achieved equality through force.
 - D. historically, the principle of equality alone has not been enough to secure women equal rights.
7. Plastics are synthetic materials so common today that we barely notice them. The process of making plastics, called polymerization, is a little over a hundred years old. Vinyl chloride was polymerized in 1838, acrylics in 1843, and polyester in 1847. Oddly, those newly synthesized plastics languished in polymer laboratories for decades because no one had yet found a use for the new materials.

We can see from the information in this passage that

- A. commercial use of a material does not always rapidly follow its discovery.
 - B. people had no need for plastics in the 1800s.
 - C. the introduction of plastics in the 1800s would have upset the world economy.
 - D. no practical types of plastics were invented until the twentieth century.
8. Primitive people tended to be highly superstitious. Anything out of the ordinary that happened was regarded with superstitious fear. Most people throughout history have been right-handed. For that reason, left-handedness was regarded as an evil omen. The Latin word for left is sinister. Since many people regarded left-handedness as bad, the word sinister entered the English language meaning "evil."

From this passage we can conclude that fear and superstition usually grew from

- A. lack of knowledge.
 - B. left-handedness.
 - C. evil omens.
 - D. terrifying circumstances.
9. In 1848, Charles Burton of New York City made the first baby carriage, but people strongly objected to the vehicles because they said the carriage operators hit too many pedestrians. Still convinced that he had a good idea, Burton opened a factory in England. He obtained orders for the baby carriages from Queen Isabella II of Spain, Queen Victoria of England, and the Pasha of Egypt. The United States had to wait another ten years before it got a carriage factory, and the first year only

75 carriages were sold.

Even after the success of baby carriages in England,

- A. Charles Burton was a poor man.
 - B. Americans were still reluctant to buy baby carriages.
 - C. Americans purchased thousands of baby carriages.
 - D. the United States bought more carriages than any other country.
10. All water molecules form six-sided structures as they freeze and become snow crystals. The shape of the crystal is determined by temperature, vapor, and wind conditions in the upper atmosphere. Snow crystals are always symmetrical because these conditions affect all six sides simultaneously.

The purpose of the passage is to present

- A. a personal observation.
- B. a solution to a problem.
- C. actual information.
- D. opposing scientific theories.

Sentence Relationship Questions

Two underlined sentences are followed by a question or statement about them. Read each pair of answers, then choose the best answer to the question or the best completion of the statement. The answers are on page 14.

11. The Midwest is experiencing its worst drought in fifteen years.
Corn and soybean prices are expected to be very high this year.

What does the second sentence do?

- A. It restates the idea found in the first.
- B. It states an effect.
- C. It gives an example.
- D. It analyzes the statement made in the first.

12. There is a lack of quality in our education system.
Her son attends an excellent high school.

What does the second sentence do?

- A. It gives a cause.
- B. It gives an example.
- C. It makes an exception.
- D. It confirms the first statement.

13. There is an increased concern with exercise and health.
More people are jogging today than ever before.

What does the second sentence do?

- A. It presents an exception.
- B. It draws a conclusion.
- C. It gives an example.
- D. It makes a comparison.

14. Brian loves playing tennis.
He spends every spare moment on the court.

What does the second sentence do?

- A. It gives a cause.
- B. It makes a comparison.
- C. It confirms the first sentence.
- D. It makes an exception.

15. Tracy is afraid of cats.
She was bitten by a cat when she was a child.

What does the second sentence do?

- A. It gives a cause.
- B. It gives an example.
- C. It makes an exception.
- D. It confirms the first statement.

16. Betsy is an excellent swimmer.
Last summer she had to be rescued when she swam too far out in rough surf.

What does the second sentence do?

- A. It gives a cause.
- B. It gives an example.
- C. It makes an exception.
- D. It relates to the first sentence.

17. The cost of foreign cars is very high.
Purchases of domestic cars are rising.

What does the second sentence do?

- A. It gives a cause.
- B. It gives an example.
- C. It makes an exception.
- D. It gives an effect.

18. The little sports cars are fast but not very comfortable.
The big sedans are comfortable but slow.

What does the second sentence do?

- A. It presents an exception.
- B. It draws a conclusion.
- C. It provides an example.
- D. It makes a comparison.

19. Good weather in Florida resulted in a huge orange crop this year.
The cost of oranges is sure to drop.

What does the second sentence do?

- A. It makes a recommendation.
- B. It makes a comparison.
- C. It draws a conclusion.
- D. It analyzes the first sentence.

20. The incidence of skin cancer is increasing.
The ozone layer is diminishing and more time is being spent outdoors.

What does the second sentence do?

- A. It gives an example.
- B. It gives a cause.
- C. It makes an exception.
- D. It confirms the first sentence.

Sample Questions for Sentence Skills

Sentence Correction Questions

Select the best version of the underlined part of the sentence. The first choice is the same as the original sentence. If you think the original sentence is best, choose the first answer. The answers are on page 14.

1. After he have raked the leaves, Bob mowed the lawn.
 - A. After he have raked the leaves
 - B. After been having to raked the leaves
 - C. After he would have raked the leaves
 - D. After he had raked the leaves
2. More cars are made in America than by the Japanese.
 - A. by the Japanese.
 - B. the Japanese make.
 - C. in Japan.
 - D. are made by the Japanese.
3. Jim withdrew from society because of a lack of confidence, it was a serious problem to him.
 - A. Jim withdrew from society because of a lack of confidence, it was a serious problem to him.
 - B. Jim's lack of confidence was such a serious problem to him that he withdrew from society.
 - C. A serious problem to Jim was a lack of confidence, and he withdrew from society.
 - D. In Jim there was a serious lack of confidence, so he withdrew from society.
4. The minister is respected because he is friendly and has a generous nature.
 - A. has a generous nature.
 - B. has a nature that is generous.
 - C. generous.
 - D. having a generous.
5. Passing by the bank the other morning, a crowd, I noticed, was waiting for the guard to open the doors.
 - A. a crowd, I noticed, was waiting
 - B. a crowd was waiting, I noticed
 - C. I noticed a crowd waiting
 - D. there was I noticed a crowd waiting

6. Ms. Taylor's remark irritated many employees, who thought her views extreme.
- irritated many employees, who thought
 - resulted in many employees who were irritated because they thought
 - irritated many employees because of thinking
 - resulted in irritating many employees, who thought
7. Dad ordered my brother to paint the garage doors because he didn't want to do it.
- he didn't want to do it.
 - of not wanting to do it.
 - Dad didn't want to do it.
 - Dad not wanting to do it.
8. Walking the dog every night, many people find it pleasant and relaxing.
- Walking the dog every night, many people find it pleasant and relaxing.
 - Many people find walking the dog every night pleasant and relaxing.
 - Walking the dog every night is found pleasant and relaxing to many people.
 - Many people walking the dog every night, this is though pleasant and relaxing.
9. When she was three years old, Tanisha was brought to America, after that she became America's most famous teacher of African history.
- America, after that she became
 - America, she became
 - America; in time she became
 - America to become
10. The number of couples waiting to adopt children is considerably larger than the children available for adoption.
- than the children
 - than there are children
 - than in terms of children
 - than the number of children
11. We need engineers to solve the problems of pollution, so enrollment in engineering programs is declining.
- pollution, so enrollment
 - pollution; as a result, enrollment
 - pollution, but enrollment
 - pollution; therefore, enrollment
12. Because some children are taught by precept rather by example, this is why they do not adopt their parent's values.
- example, this is why they
 - example, they
 - example is why they
 - example, thus they
13. If a worker loses his job, you may be eligible for unemployment insurance.
- job, you may be
 - job; you may be
 - job, he may be
 - job, they may be
14. Ms. Rose planning to teach a course in biology next summer.
- planning
 - are planning
 - with a plan
 - plans
15. Yesterday the President announced that he would retire from political life, to amazed reporters.
- Yesterday the President announced that he would retire from political life, to amazed reporters.
 - Yesterday the President announced that he would be retire from political life, amazing reporters.
 - The President, to the amazement of reporters, announced that he would retire from political life yesterday.
 - Yesterday the President announced to amazed reporters that he would retire from political life.
16. Predictions twenty years ago that the phonograph record was about to become obsolete have proven to be true.
- Predictions twenty years ago that
 - Predictions twenty years ago,
 - Twenty years ago, predictions that
 - Predictions, twenty years ago
17. Jose wanted to study he tried to keep his roommates quiet; but he did not succeed.
- Jose wanted to study he tried to keep
 - Jose wanted to study, he tried to keep
 - Because he wanted to study, Jose tried to keep
 - Jose wanting to study, and trying to keep
18. When you move out of an apartment before the contract expires, this is an example of breaking a lease.
- When you move out of an apartment before the contract expires, this
 - You move out of an apartment before the contract expires, this
 - Moving out of an apartment before the contract expires
19. Knocked to his knees, the quarterback looked as if he were in pain.
- Knocked to his knees, the quarterback looked
 - The quarterback was knocked to his knees, looked
 - The quarterback looked knocked to his knees
 - The quarterback, looking knocked to his knees,

Construction Shift Questions

Rewrite the sentence in your head, following the given directions. Keep in mind that your new sentence should be well written and should have essentially the same meaning as the original sentence. The answers are on page 14.

20. Being a female jockey, she was often interviewed.
Rewrite, beginning with She was often interviewed . . .

The next words will be

- A. on account of she was
- B. by her being
- C. because she was
- D. being as she was

21. It is now more than two centuries since the American Revolution.
Rewrite, beginning with More than two centuries . . .

The next words will be

- A. having passes since
- B. has passed although
- C. had passed while
- D. have passed since

22. This car at no time has been reliable and it never will be reliable.
Rewrite, beginning with This car has never . . .

The next words will be

- A. been reliable and never will be
- B. at any time been reliable and never will be
- C. shown reliability and never will be
- D. come close to being reliable and never will be

23. Owing to his helpful attitude, Jonathan had many friends.
Rewrite, beginning with Friends . . .

The next words will be

- A. flocked to Jonathan although
- B. flocked to Jonathan because of
- C. flocked to Jonathan while
- D. flocked around Jonathan

24. Pamela was unable to fly kites, to blow bubbles with her gum, and to climb trees.
Rewrite, beginning with Pamela could not . . .

The new sentence will include the words

- A. and to climb
- B. to climb
- C. or to climb
- D. or climb

25. Three composers produced the culmination of the Classical era — Mozart, Hayden, and Beethoven.
Rewrite, beginning with Mozart . . .

The new sentence will include

- A. was the composers
- B. were the composers who
- C. were only composers
- D. were three of the composers who

26. Running down the track he tossed his head back and smiled at the crowd.
Rewrite, beginning with He tossed . . .

The new sentence will include

- A. while the crowd
- B. crowd even while he ran
- C. crowd while running
- D. as if running

27. It occurred to him as he stepped into the heavy rain that he had forgotten his umbrella.
Rewrite, beginning with As he stepped . . .

The new sentence will include

- A. him but that
- B. him with
- C. to him with
- D. to him that

28. Kelly was driving fast in the rain and her car skidded on a pile of wet leaves.
Rewrite, beginning with Because Kelly was driving fast in the . . .

The next words will be

- A. rain so her car skidded
- B. rain, her car skidded
- C. rain. Her car skidding
- D. raining, her car

29. The hunt for the money was abandoned as they had been searching the house for hours.
Rewrite, beginning with The hunt for the money was abandoned after . . .

The next words will be

- A. the time the house was searched
- B. the house had been searched
- C. having the house searched
- D. They had searched the house

30. Writing a best seller had earned the author a sum of money and had freed him from the necessity of selling his pen for the political purposes of others.
Rewrite, beginning with The author was not obliged . . .

The new sentence will include

- A. consequently he earned
- B. because he had earned
- C. by earning
- D. as a means of earning

31. In the modern world, groups of people living thousands of miles apart may still be dependent on each other politically, culturally, and economically. Change people living to people may live.

The new sentence will include

- A. apart and still be dependent
- B. apart so as to be dependent still
- C. apart, they are still dependent
- D. apart, but would still be dependent

Sample Questions for Arithmetic

The arithmetic skills test has 17 questions on operations with whole numbers, fractions, decimals, and percents, including application and problem solving. You will be given pencils and paper but you **cannot** use a calculator. The answers are on page 14.

Tip: The test is untimed, so be sure to double check your work and compare your answer with the choices given.

This portion of the test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts. There will be 17 questions on the actual placement test.

1. Add/Simplify: $2\frac{2}{3} + 1\frac{3}{8}$
- A. $3\frac{5}{11}$
 - B. $4\frac{1}{24}$
 - C. $3\frac{1}{4}$
 - D. $3\frac{5}{6}$
2. Subtract/Simplify: $6\frac{3}{4} - 4\frac{6}{7}$
- A. 3
 - B. $1\frac{25}{28}$
 - C. $\frac{7}{11}$
 - D. $\frac{2}{28}$
3. Multiply/Simplify: $3\frac{4}{5} \times 15$
- A. 57
 - B. $45\frac{4}{5}$
 - C. 36
 - D. $\frac{19}{75}$

4. Divide/Simplify: $4\frac{1}{5} \div 2\frac{1}{7}$
- A. 9
 - B. $\frac{25}{49}$
 - C. $1\frac{24}{25}$
 - D. $2\frac{1}{12}$

5. Multiplying by 0.00001 is the same as dividing by:
- A. 100,000
 - B. $\frac{1}{100,000}$
 - C. 10,000
 - D. $\frac{1}{10,000}$

6. Divide: $36.14 \div 6.95$
- A. 52
 - B. 0.0052
 - C. 5.2
 - D. 520

7. Divide/Simplify: $802 \div 5$
- A. $16\frac{2}{5}$
 - B. $16\frac{1}{2}$
 - C. $160\frac{4}{5}$
 - D. $160\frac{2}{5}$

8. Divide/Simplify: $0.5 \div 0.005$
- A. 0.01
 - B. 0.0001
 - C. 100
 - D. 1000

9. Divide/Simplify: $\frac{18}{\frac{2}{9}}$
- A. 81
 - B. 1
 - C. $\frac{1}{81}$
 - D. $\frac{1}{9}$

10. Add/Simplify: $0.046 + \frac{23}{50}$
- A. 0.506
 - B. 0.92
 - C. 0.092
 - D. 0.56

11. The fraction $\frac{246}{60}$ is equal to all of the following EXCEPT:
- $4 + 0.1$
 - $9.91 - 5.9$
 - $\frac{18}{5} + \frac{1}{2}$
 - $3.5 + \frac{3}{5}$
12. Which of the following shows a way to change a $\frac{6}{7}$ to an equivalent fraction?
- $\frac{6}{7} \times \frac{3}{3}$
 - $\frac{6}{7} + \frac{7}{6}$
 - $\frac{6}{7} \times \frac{7}{6}$
 - $\frac{6}{7} - \frac{1}{7}$
13. How many thirds are in 8.94?
- 2.98
 - 0.336
 - 26.82
 - 5.96
14. If $\frac{N}{1000}$ equals 4.52, then N is approximately:
- 450
 - 4500
 - 4000
 - 400
15. Which of the following is the closest approximation to 14.235×9.952 ?
- 126
 - 139
 - 140
 - 142
16. If $\frac{2}{5}$ of a number is 30, what is $\frac{1}{3}$ of twice the number?
- 50
 - 8
 - 2
 - 4
17. Which of the following is closest to 32% of \$563?
- $\$563 \times 32$
 - $\$563 \times \frac{1}{3}$
 - $\$563 \times \frac{9}{25}$
 - $\$563 \times \frac{1}{2}$
18. A recipe calls for 2 cups of milk for every 5 cups of flour. If 7 cups of milk is used, how many cups of flour should be used?
- 10
 - $2\frac{4}{5}$
 - $17\frac{1}{2}$
 - $1\frac{2}{5}$
19. Henry planned to move $\frac{1}{3}$ of his CD collection in the new cabinet in the morning and the rest in the afternoon. If he moved only $\frac{2}{3}$ as many as he planned in the morning, what fraction of his CD's were left to be moved in the afternoon.
- $\frac{2}{9}$
 - $\frac{9}{2}$
 - $\frac{1}{3}$
 - $\frac{7}{9}$
20. If 30 is 25 percent of a number, then the number is what percent of 30?
- 40
 - 4
 - 75
 - 400
21. Janie sold her diamond necklace for \$560, which was 12% more than what she originally paid for it. How much was the original price?
- \$672.00
 - \$627.20
 - \$500.00
 - \$492.80
22. Because of a typographical error, Mark mistakenly wrote 50 km instead of 50 cm. The erroneous distance was how many times the intended distance?
- 1,000
 - 100,000
 - 10,000
 - 0.000001
23. If $\frac{1}{3}$ sheet of fabric is used to make one shirt, what is the total number of shirts that can be made from 40 sheets of fabric?
- 133
 - 13
 - 12
 - 120

24. Last year, John's salary was \$25,000. If he got a \$2,000 raise for the year, what percent of last year's salary is his raise?
- A. 12.5%
 B. 80%
 C. 125%
 D. 8%
25. A couch is $8\frac{1}{6}$ feet long. The material needed to make a slipcover is to be $2\frac{1}{3}$ times as long to allow for hems and tucking under. How long a piece of material is needed?
- A. $16\frac{1}{18}$
 B. $3\frac{1}{2}$
 C. $19\frac{1}{18}$
 D. $16\frac{1}{3}$

Sample Questions for Elementary Algebra

This portion of the test measures your ability to perform basic algebraic operations and to solve problems that involve elementary algebra concepts. There will be twelve questions on the actual algebra placement test. The answers are on pages 14.

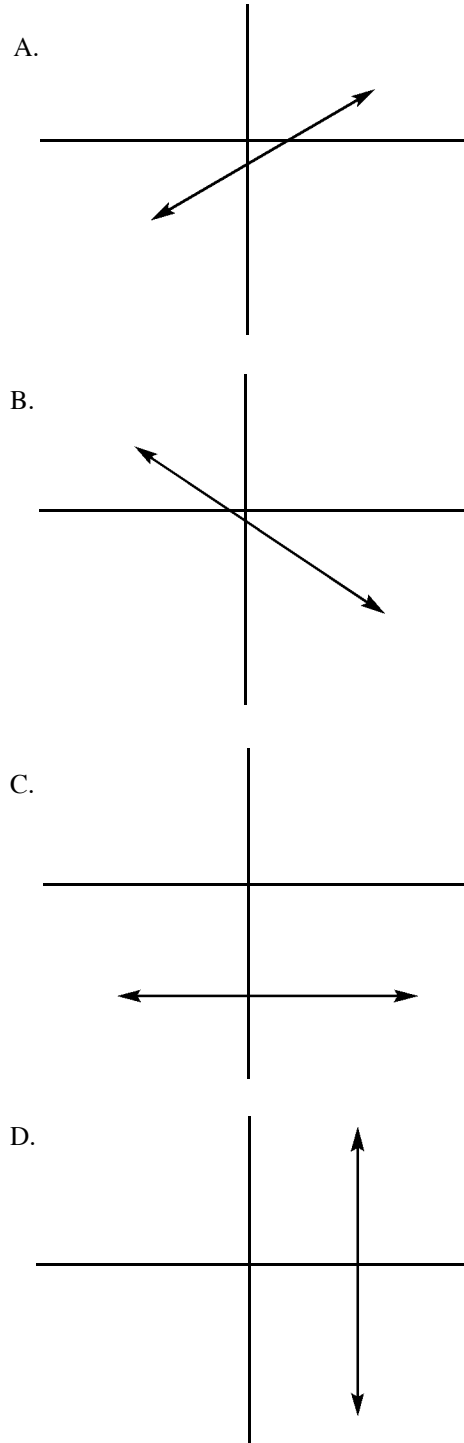
1. Which of the following is the greatest factor of the equation: $18x^3 + 4x^2 - 6x^4$
- A. $2x$
 B. x^3
 C. $2x^2$
 D. $4x^2$
2. Which of the following is a factor of the equation: $2x^2 + x - 1$?
- A. $(x - 1)$
 B. $(2x - 1)$
 C. $(x + 2)$
 D. $(2x + 1)$
3. If $2x - 6 = 4$, then x equals:
- A. 5
 B. -1
 C. 1
 D. -5
4. If $x = 3$ and $y = -2$, then $2x^2 - y - 3$ equals:
- A. 31
 B. 17
 C. 35
 D. 13

5. If $\frac{3x}{2} + 2 = \frac{x}{6}$, then x equals:
- A. $-\frac{1}{8}$
 B. $-\frac{1}{4}$
 C. $-\frac{3}{2}$
 D. -1
6. If $4 = \frac{2+a}{a}$, then a equals:
- A. $\frac{2}{3}$
 B. $\frac{3}{2}$
 C. -1
 D. 2
7. If $3a^2 - n + 4b^2 = (3a - 2b)(a - 2b)$, then n equals:
- A. $-4ab$
 B. $4ab$
 C. $-8ab$
 D. $8ab$
8. All of the following are equal EXCEPT:
- I. $x > -5$ II. $-2x < 10$
 III. $4x < -20$ IV. $x - 3 > -8$
- A. I
 B. II
 C. III
 D. IV
9. Given the following:
 $x = |-5 + -3|$, $y = |-5 - (-3)|$, and $z = |-5| - |-3|$,
 which of the following is true about the numbers x , y , and z ?
- A. $x < y$
 B. $x = y$
 C. $x < z$
 D. $y = z$
10. If $2x + y = 14$ and $x = 3y$, then x equals:
- A. 2
 B. 6
 C. 8
 D. 12
11. Simplify: $\frac{4x^4}{2x^3}$
- A. $2x^7$
 B. $2x$
 C. $2x^{12}$
 D. $\frac{x^{-1}}{2}$

12. Simplify: $\frac{12x^3 - 2x}{6x}$
- A. $2x^3 - 3x$
 B. $2x^2 - 3$
 C. $2x^2 - \frac{1}{3}$
 D. $\frac{5x}{3}$
13. Simplify: $\frac{2x}{4x + 6x^2}$
- A. $\frac{1}{3x + 2}$
 B. $\frac{1}{5x^2}$
 C. $\frac{1}{2 + 6x^2}$
 D. $2 + 3x$
14. Simplify: $(5 - 8) - (4 - 5)$
- A. 2
 B. -2
 C. 4
 D. -4
15. Evaluate/Simplify: $\frac{4x}{2y} \cdot \frac{3y}{8xy}$
- A. $3x^2y^3$
 B. $\frac{4y}{3}$
 C. $\frac{3}{4y}$
 D. $\frac{3}{4}$
16. Which of the following is the greatest?
- A. $10 + (-2)$
 B. $10 - (-2)$
 C. $10 \times (-2)$
 D. $10 \div (-2)$
17. Which of the following is the least?
- A. -50
 B. -20
 C. 0
 D. $\frac{1}{3}$
18. Evaluate/Simplify: $(2\sqrt{2x})^2$
- A. $4x^2$
 B. $4x$
 C. $8x^2$
 D. $8x$
19. Evaluate/Simplify: $(\sqrt[4]{4x^2})^2$
- A. $2x$
 B. $4x$
 C. $16x^4$
 D. $4x^2$
20. Evaluate/Simplify: $(\frac{3x}{4y})^2$
- A. $\frac{3x^2}{4y^2}$
 B. $\frac{9x^2}{4y}$
 C. $\frac{9x^2}{16y^2}$
 D. $\frac{6x^2}{8y^2}$
21. Evaluate/Simplify: $(2x^2y)^2$
- A. $2x^2y^2$
 B. $4x^2y^2$
 C. $4xy^2$
 D. $4x^4y^2$
22. If $x - z = xy + w$, then x equals:
- A. $\frac{w+z}{y}$
 B. $\frac{w+z}{1-y}$
 C. $w + z - y$
 D. $\frac{1-y}{w+z}$
23. If $2a^2 + b = c$, then a equals:
- A. $\pm \sqrt{\frac{b-c}{2}}$
 B. $\pm \sqrt{\frac{c-b}{2}}$
 C. $\pm \sqrt{b c - 2}$
 D. $\pm \sqrt{\frac{2}{b-c}}$
24. Evaluate/Simplify: $(x - 3)^2$
- A. $x^2 + 6x - 9$
 B. $x^2 - 6x + 9$
 C. $x^2 - 9$
 D. $x^2 + 9$
25. Evaluate/Simplify: $(x - 1)(2x + 3)$
- A. $2x^2 - x - 3$
 B. $2x^2 + 5x - 3$
 C. $2x^2 + x - 3$
 D. $2x^2 - 3$

26. Simplify: $\frac{1}{2x} + \frac{2}{x-1}$
- A. $\frac{3}{3x-1}$
 B. $\frac{5x-1}{2x^2-2x}$
 C. $\frac{4x-1}{2x}$
 D. $\frac{3}{2x^2-2x}$
27. The length of a rectangle is four more than twice the length of the width. If the area of the rectangle is 16 square feet, what is the length of the rectangle?
- A. 8
 B. 4
 C. 2
 D. 6
28. The equation $2x + 3 > 15$ could be used to represent all of the following sentences **EXCEPT**:
- A. Three more than twice a number is greater than fifteen.
 B. Fifteen is less than twice a number increased by three.
 C. A number squared plus three is greater than fifteen.
 D. Double a number increased by three is greater than fifteen.
29. One number is four more than another. If four times the smaller number is equal to twice the larger, what is the smaller number?
- A. 8
 B. 4
 C. 16
 D. $-\frac{4}{3}$
30. There are 52 cards in a deck. If x cards are removed, which of the following expressions represent the number of cards left?
- A. $x - 52$
 B. $x + 52$
 C. $52 - x$
 D. $\frac{52}{x}$
31. In the graph of $3x + 2y = 6$, what are the coordinates of the point where the line crosses the y -axis?
- A. (6, -6)
 B. (2, 0)
 C. (0, 3)
 D. (4, -3)

32. Which graph represents the graph of $x - y = 3$?



ANSWERS to Sample Questions

Reading Comprehension

1. D
2. C
3. A
4. D
5. C
6. D
7. A
8. A
9. B
10. C
11. B
12. C
13. C
14. C
15. A
16. C
17. D
18. D
19. C
20. B

Sentence Skills

1. D
2. C
3. B
4. C
5. C
6. A
7. C
8. B
9. C
10. D
11. C
12. B
13. C
14. D
15. D
16. A
17. C
18. C
19. A
20. C
21. D
22. A
23. B
24. D
25. B
26. C
27. D
28. B
29. D
30. B
31. A

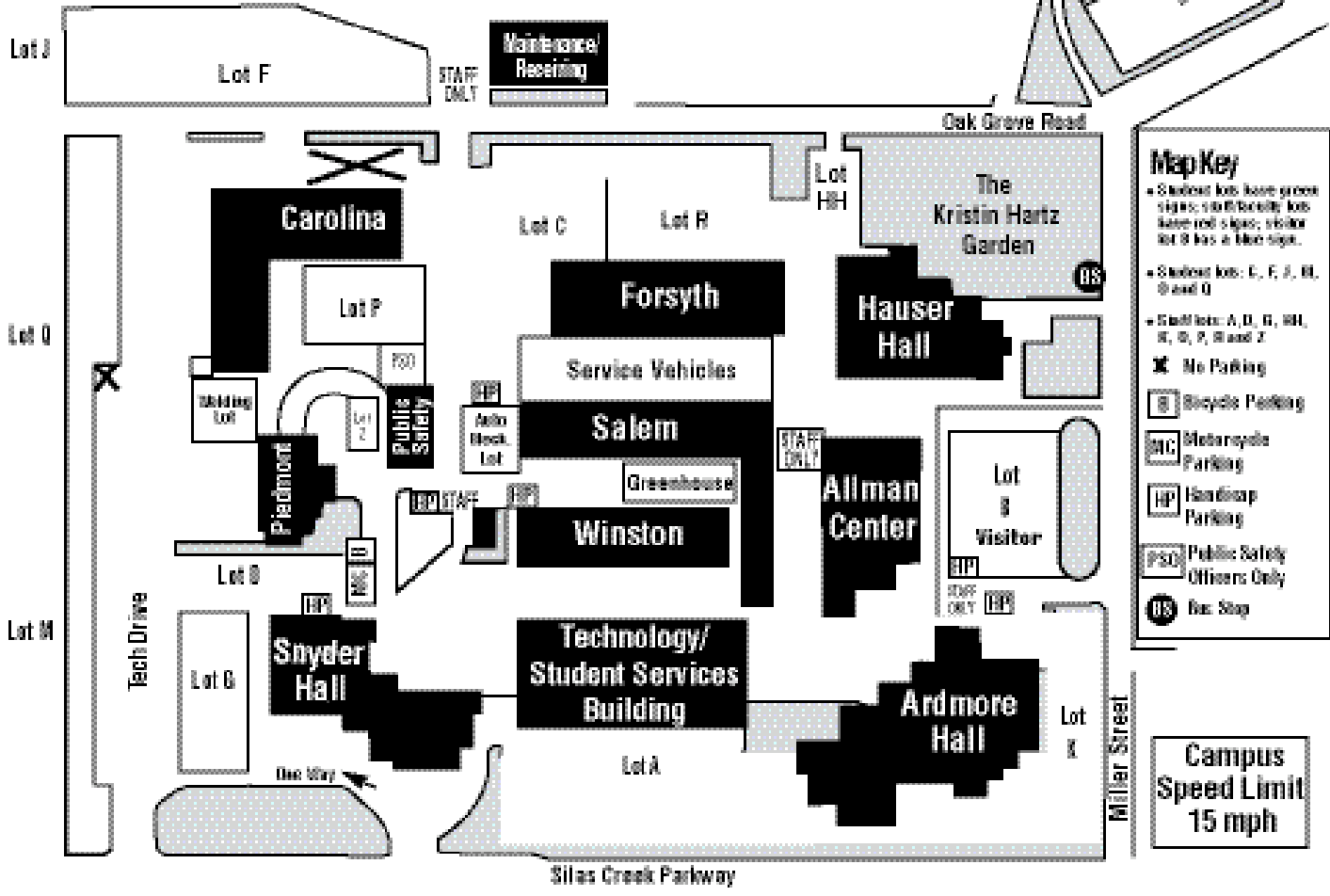
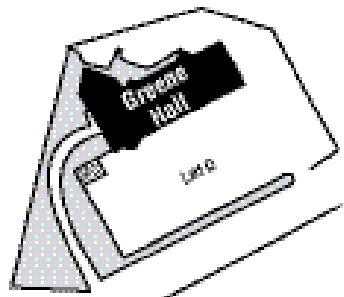
Arithmetic

1. B
2. B
3. A
4. C
5. A
6. C
7. D
8. C
9. A
10. A
11. B
12. A
13. C
14. B
15. D
16. A
17. B
18. C
19. D
20. D
21. C
22. B
23. D
24. D
25. C

Elementary Algebra

1. C
2. B
3. A
4. B
5. C
6. A
7. D
8. C
9. D
10. B
11. B
12. C
13. A
14. B
15. C
16. B
17. A
18. D
19. D
20. C
21. D
22. B
23. B
24. B
25. C
26. B
27. A
28. C
29. B
30. C
31. C
32. A

EDUCATION THAT WORKS
ForsythTech MAIN CAMPUS
 COMMUNITY COLLEGE



Map Key

- Student lots have green signs; staff/faculty lots have red signs; visitor lot is black sign.
- Student lots: C, F, J, M, O and Q
- Staff lots: A, D, H, HH, K, Q, P, S and Z
- ✘ No Parking
- Ⓚ Bicycle Parking
- Ⓜ Motorcycle Parking
- ⓂⓂ Handicap Parking
- ⓂⓂⓂ Public Safety Officers Only
- ⓀⓀ Bus Stop

Campus Speed Limit 15 mph

Forsyth Technical Community College
 2100 Silas Creek Parkway
 Winston-Salem, NC 27103

Allman Center

- Admissions Office
- Alumni Relations and Special Events Office
- Business Office
- Cashier's Office
- Classrooms/Labs
- Counseling and Career Services
- Disability Services Office
- Educational Partnerships
- Forsyth Tech Foundation
- Grants Office
- Human Resources Office
- Information Desk
- Information Systems Office
- Institutional Advancement Office
- James A. Rousseau II Minority Male Mentoring Program
- Marketing and Public Relations
- President's Office

Ardmore Hall

- Audiovisual Services
- Auditorium A and B
- Classrooms
- Development Education Office
- Directed Studies Center
- Distance Learning Center
- Learning Center
- Library

Carolina Annex

- Environmental Services Office
- Public Safety Office

Carolina Building

- Classrooms/Shops

Forsyth Building

- Classrooms/Shops

Greene Hall

- Classrooms/Labs
- Health Technologies Division Office

Hauser Hall

- Business Information Technologies Division Office
- Cafeteria
- Classrooms/Labs
- Shugart Women's Center at Forsyth Tech

Maintenance/Receiving Building

- Physical Plant
- Shipping and Receiving

Piedmont Building

- Classrooms/Shops

Salem Building

- Classrooms/Shops

Snyder Hall

- Classrooms/Labs
- Faculty/Staff Service Center
- Middle College Office
- Research and Assessment Office

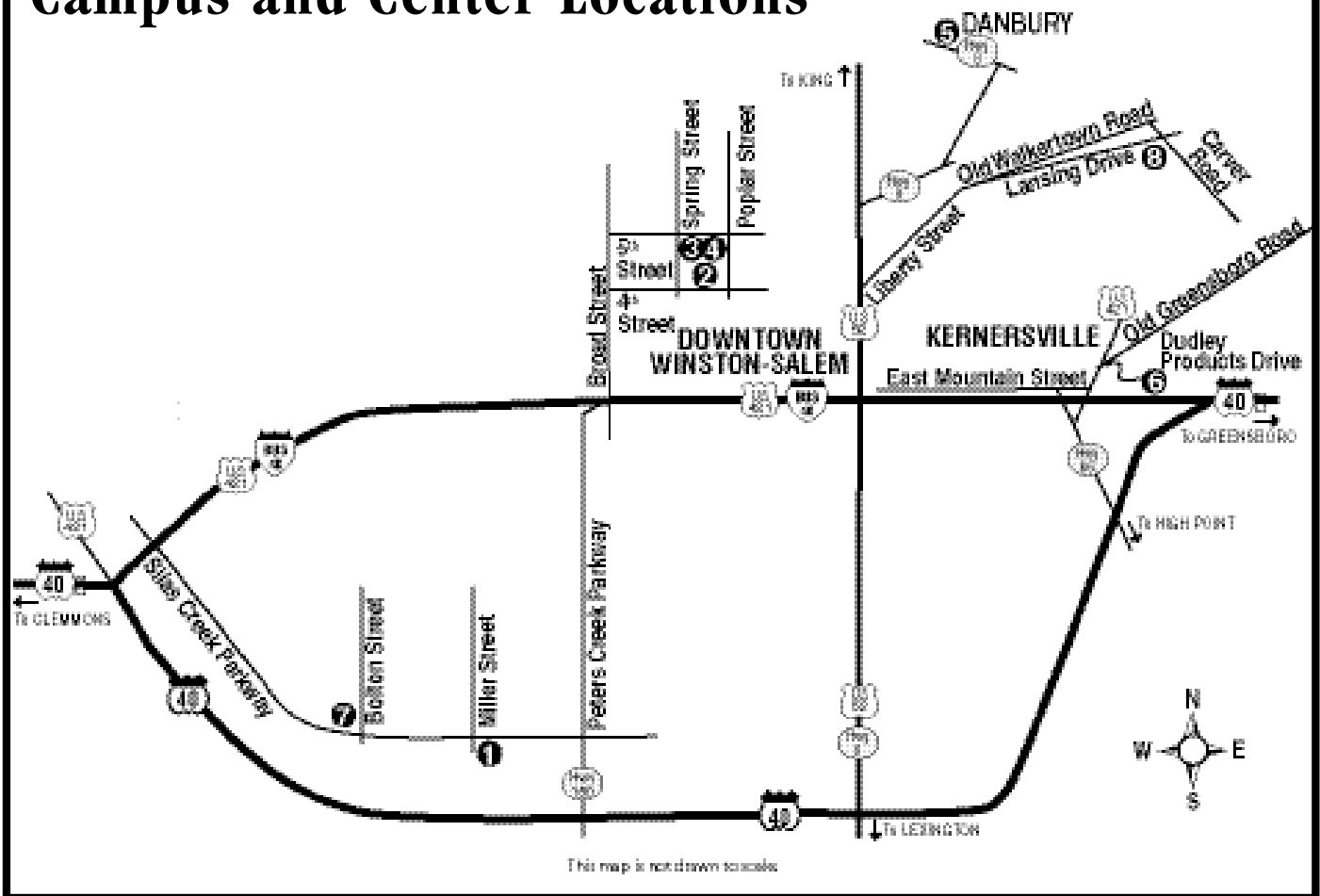
Technology/Student Services Building

- Arts and Sciences Division Office
- Bookstore
- Classrooms/Labs
- Instructional Services Office
- Student Activities
- Student Government Council Office
- Thomas H. Davis /TEC Center

Winston Building

- Classrooms/Shops
- Engineering Technologies Division Office

Forsyth Technical Community College Campus and Center Locations



1 Main Campus
2100 Silas Creek Parkway
Winston-Salem, NC 27103
(336) 723-0371
(Mailing address for all Forsyth County locations)

2 4th Street Small Business Center
Chamber Building
601 West 4th Street
Winston-Salem, N.C.
(336) 631-1320

3 5th Street Library Center
Forsyth County Public Library
660 West 5th Street
Winston-Salem, N.C.
(336) 631-1325

4 Forsyth Tech Hispanic Center
Forsyth County Public Library
660 West 5th Street
Winston-Salem, N.C.
(336) 631-1326

5 Stokes County Center
1012 Main Street
Danbury, N.C.
(336) 593-2482

6 Grady P. Swisher Center
1251 Dudley Products Drive
Kernersville, N.C.
(336) 734-7903

7 West Campus
1300 Bolton Street
Winston-Salem, N.C.
(336) 761-1002

8 Mazie S. Woodruff Center
4905 Lansing Drive
Winston-Salem, N.C.
(336) 734-7950



Forsyth Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associates degrees, diplomas and certificates.