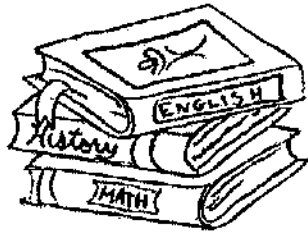

AMI Packet

#1

8th Grade



Section 1 (Calculator-Inactive)

Answer questions 1–20. Answer questions outlined in green in your test book. Answer all other questions on the Answer Form. You may not use a calculator.

1 Which fraction is equivalent to $0.3636\dots$? Write your answer in simplest form.

Answer _____

2 The value of $\sqrt{30}$ is between which two whole numbers?

- A 1 and 3
- B 4 and 5
- C 5 and 6
- D 6 and 7

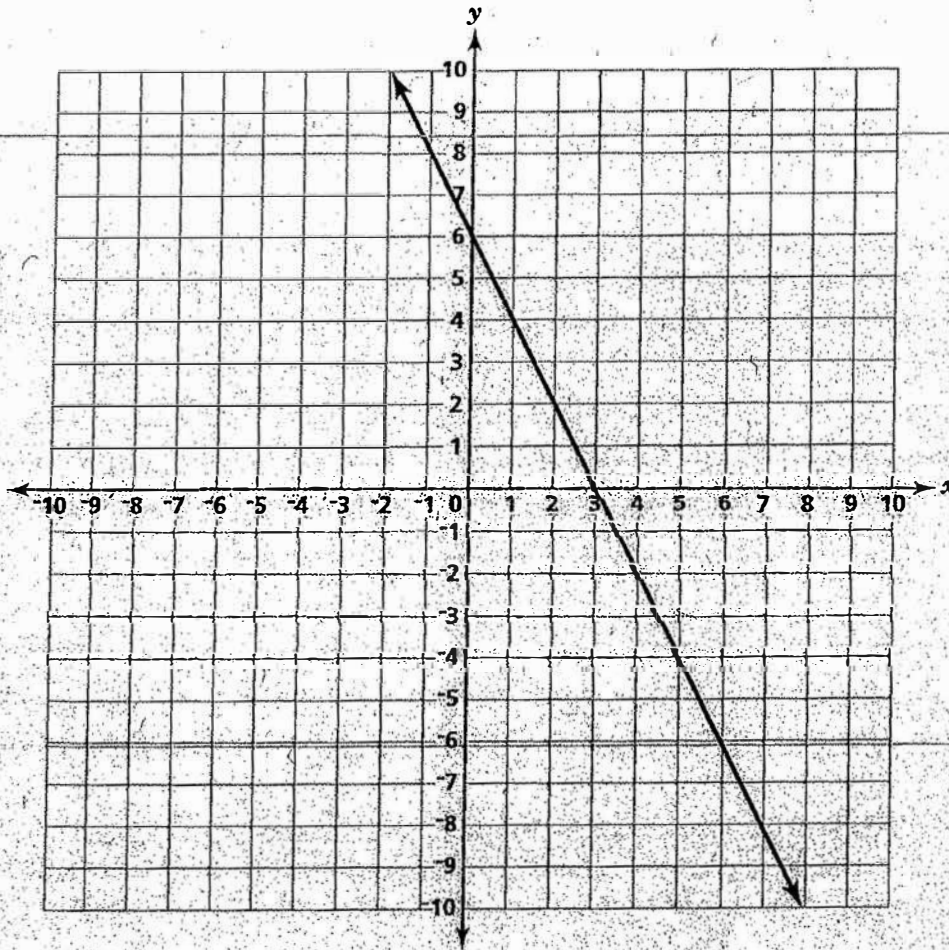
3 Which expressions are equivalent to $[(-2)^2]^3 + (3^2)^2$? Mark all that apply.

- A $[(2)^2]^3 + (3^2)^2$
- B $[(2)^2]^2 \times 4 + (3^2)^2$
- C $[(2)^3]^2 + 3^4$
- D $[(3)^2]^2 + (3^2)^2$
- E $[(-2)^3]^2 + (9)^2$
- F $[(-2)^3]^2 + (3)^4$

Go On

4

Consider the graph below.



Part A

Find the y -intercept and slope of the line. Fill in the blanks in the statement.

Answer The y -intercept of the line is _____, and the slope of the line is _____.

Part B

Determine the equation of the line. Fill in the blanks in the equation.

Answer _____ = _____ + _____

Part C

Consider the triangle with vertices at $(0, 6)$, $(0, 0)$, and $(3, 0)$ and a second triangle with vertices at $(3, 0)$, $(x, 0)$, and (x, y) , where (x, y) is any point on the hypotenuse of the first triangle. Describe how you could derive the equation of the line using these two similar triangles. Be specific.

Go On

Sentences and Sentence Fragments A

10a. A **sentence** is a word group that contains a subject and a verb and that expresses a complete thought.

A **sentence fragment** is a word group that looks like a sentence but does not contain both a subject and a verb or does not express a complete thought.

SENTENCE FRAGMENT Those on board the sailboat. [no verb]

Shouted to the swimmers near the shore. [no subject]

SENTENCE Those on board the sailboat shouted to the swimmers near the shore.

EXERCISE Identify each of the following word groups as a sentence or a sentence fragment. On the line provided, write *S* for sentence or *F* for sentence fragment.

Examples *S* 1. Last Saturday, Antonio and his friends went to the beach.

 F 2. A day that they will not soon forget.

1. Antonio and his friends in the bay.
2. They spotted a shark swimming toward a sailboat.
3. One of the sailboats nearby.
4. Efforts to distract the shark.
5. The people on the shore shouted at the swimmers.
6. The shark opened its huge jaws.
7. As close to the shore as this shark was.
8. The fast-moving shark swam under one of the sailboats.
9. On its way toward shore.
10. Slicing the surface of the water.
11. The swimmers could see only the fin on the shark's back.
12. Everyone on the beach continued to wave and shout.
13. Swam toward shore with all their strength.
14. With much help from the lifeguards.
15. When they reached the shore.
16. The swimmers were trembling.
17. After they realized that they were safe.
18. Later, the swimmers spoke to news reporters and photographers.
19. The lifeguards closed the beach.
20. And sent everyone away.

Sentences and Sentence Fragments B

10a. A *sentence* is a word group that contains a subject and a verb and that expresses a complete thought.

A *sentence fragment* is a word group that looks like a sentence but does not contain both a subject and a verb or does not express a complete thought.

SENTENCE FRAGMENT Shirley Chisholm, the first African American congresswoman.

SENTENCE Shirley Chisholm, the first African American congresswoman, was elected to the U.S. House of Representatives in 1968.

EXERCISE Identify each of the following word groups as a sentence or a sentence fragment. On the line provided, write *S* for *sentence* or *F* for *sentence fragment*.

Example F 1. One clear night in the middle of summer.

1. Several teenagers went camping one clear night in the middle of summer.
2. The campers sat around a campfire.
3. Which kept them warm.
4. Someone suggested that they tell stories.
5. Camila told an interesting story.
6. About a man who lived on a houseboat near a village.
7. Never spoke to the villagers.
8. People thought he was a thief.
9. And blamed him when things were lost.
10. One day the man left the boat.
11. And walked far away.
12. A curious villager entered the boat.
13. To see what was inside.
14. Very surprised by what he found inside.
15. There were all kinds of wooden toys.
16. That the mysterious man had built.
17. Each toy was carefully painted.
18. The toys were gifts for the village children.
19. The villagers had misjudged the man.
20. Realized that the man was very kind and felt sorry.

Name _____

Day 1

Growing Plants

When you look out on a sunny day, the light appears colorless. In fact, that light contains all of the colors of the visible light spectrum, from red to violet (Figure 1). Each color has a different wavelength. Red has the longest wavelength and violet has the shortest wavelength. When all the waves are seen together, they make white light. Light is essential in a plant's life. Without light a plant cannot grow, reproduce, or photosynthesize (make energy). Plants utilize the different colors found in visible light to control different aspects of their growth. Different wavelengths of light can trigger or inhibit (stop) growth and flowering in plants. Light is extremely important to the healthy growth of plants.

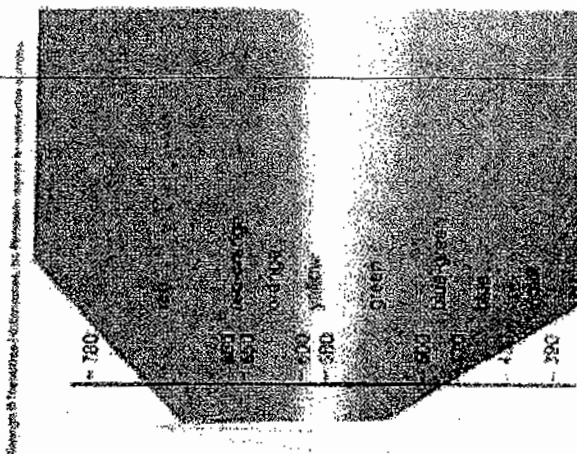


Fig. 1 Wavelengths of visible light in nanometers (nm).

A student was doing an experiment using the scientific method. A picture of the student's project is shown below.



1. What is the student's variable?

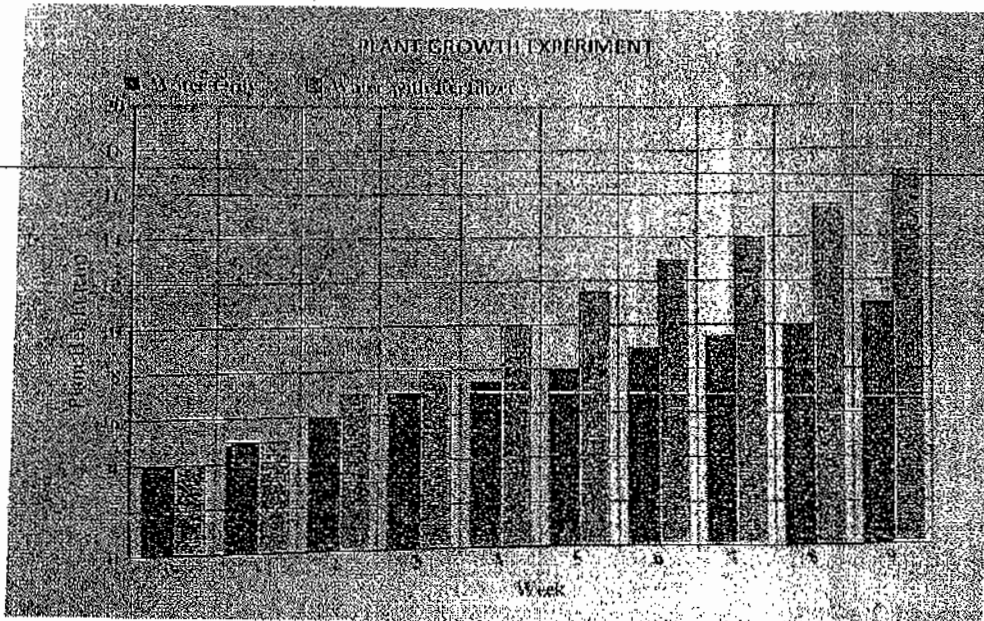
- a. the temperature of the air around the plant
- b. the angle of the light shining on the plant
- c. the brightness of the light shining on the plant
- d. the type of plant being tested

2. List the controls you see in the image.

3. Based on the passage and the model, how do you think each plant will grow? Provide evidence to support your claim.

Mary was interested in how plants grow since her grandparents grew a garden each year. She always heard them talking about putting fertilizer on their garden. She wondered if the fertilizer really helped the plant grow better. She followed these steps to perform her experiment:

1. Gather 6 plastic cups. Fill each of the plastic cups $\frac{3}{4}$ full with potting soil.
2. Plant one bean seed in each of the plastic cups. The seeds should be planted $\frac{1}{2}$ inch deep in the soil. Add $\frac{1}{4}$ cup water to each cup.
3. In half the cups, add fertilizer, following the directions of the fertilizer package.
4. Place the cups in an area that gets plenty of sunlight during the day.
5. Water each plant with up to $\frac{1}{4}$ cup water each day unless there is standing water in the cup. Because the cups have no drainage, fungus can grow and kill the plant if it receives more water than it can use, so water by pouring small amounts of water into the cup and allowing it to sink into the soil, and stop when a miniature puddle forms at the soil surface.
6. Keep a careful record of the plants' growth each week.
7. Take measurements of the length of the plants. Measure from the base of the plant where it touches the soil to the top of the stem. Be careful not to break the growing tip off of the plant while measuring, be very gentle.
8. Note the color when the plants begin to germinate, describe the thickness of the stem, record the numbers of leaves present. Keep all the information in your log book. This will help determine which plants were the healthiest.



4. How tall were the plants when this experiment began? _____

5. According to this graph, was the fertilizer helpful to Mary's plants? Provide evidence from graph to support your claim.

6. How much taller did the plants grow with the fertilizer than without the fertilizer? _____

7. On week 8, how tall were the plants without fertilizer? _____

8. Another student completed the same experiment. He had a picture of a plant that had a height of 12 cm. Between which two weeks did the student's plant probably come from? Provide evidence from graph to support your claim.

Read this passage about a superhero called the Geometer. In it, he battles a monster who has caused panic in a city. Go to page 46 of your answer document, and then answer multiple-choice questions 1 through 8 and open-response question A.

adapted from

The Adventures of the Great Geometer

by J. T. Stanley

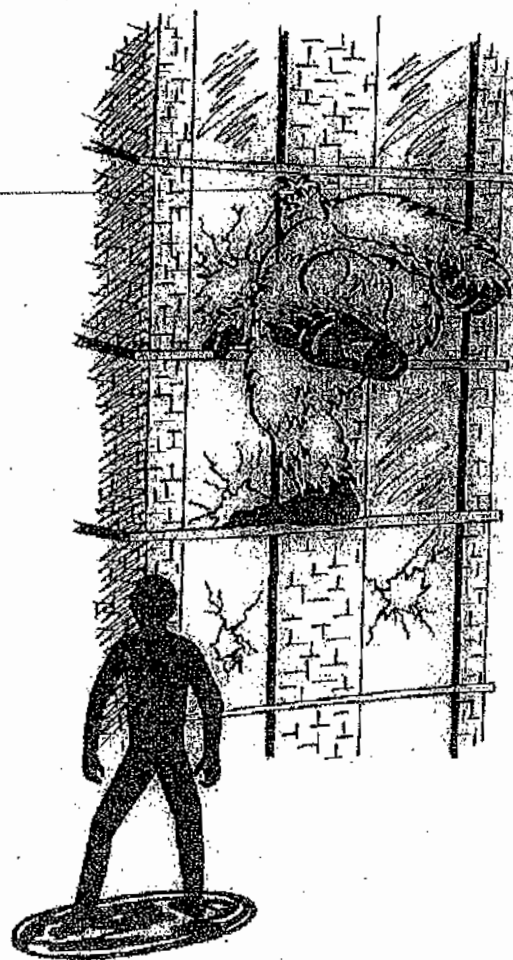
The scene was like something out of a monster movie. In the distance, a skyscraper coughed out smoke in a long, black column rising to the sun. A mammoth creature, covered in white fur, was perched two thirds of the way up one side of the skyscraper. A great, black toe from his right foot plugged up a window about ten flights up. His other leg disappeared around the corner of the building. He kept clawing and clawing at the wall above his head, which made bricks and glass rain down into his wild eyes. This seemed to make him furious! He let out a bellow that shook the ground where I stood.

2 I'd seen enough. I ducked into an alley, making sure I wasn't being watched, and I tapped my Cosmic Protractor three times. Instantly, my clothes were transformed into the gleaming, silver uniform of the Geometer! My glasses melted into reflective goggles, which were part of my disguise. Time to go to work.

I stared at the ground around my feet and created my favorite method of transport, the flying circle. I swooped up on the disk and out of the alleyway. All eyes were still fixed on the monster attacking Hansen Tower, so no one noticed me soaring into battle until I was nearly there.

As I approached, I could see that people were trapped inside of the building! No doubt the elevators had been damaged by the beast. Now I had two tasks: defeat the monster and rescue those people.

5 First of all, that creature had to go. My flying circle's mirror-reflective surface caught the sun in a flash of light that drew the monster's attention. He turned to find the



light, and that's when he saw me. He began sweeping a huge, heavy arm through the air. If his arm connected with me, I was finished. I might be able to create strong and powerful shapes out of nothing, but I'm as fragile as the next guy!

I thought about an enormous octagon, and, just by thinking about it, created it. It hung in the air in front of me and blocked his huge fist. I hoped he'd recognize it as a stop sign, but it wouldn't matter in a moment because this was just the first part of my plan.

While the monster pounded the octagon with echoing thuds, I began to measure him, trying to figure out how big to make the sphere I was planning. I solved the math problem and drew a wide circle around Mr. Big Guy. I spun it around and around, and soon I had the creature separated from the building and caged in a shining globe. He looked like an enormous disco ball. He started roaring again. Even though he was muffled by the sphere, hearing him from this close made my head spin.

I had to move him, but where do you set down a hundred-foot ball? It was hollow and, except for Ol' Sourpuss inside, it didn't weigh anything. It would float! With both hands, I gave the sphere a slight push to the east, and it glided down toward the bay. Now the beast was out of the way. But there were still people in trouble!

With Captain Cranky no longer blocking my view, I noticed that most people in the building were on the thirtieth floor. Then, I noticed why—the monster had knocked out the stairwell on this side of the building. The damage must have messed up the electricity, too, which was why the elevators weren't working. I whipped up a thirty-story cylinder as close to the side of the building as I could get it. I made a little rectangle from the window on the thirtieth floor to the cylinder for a bridge.

Everyone walked across the rectangle onto the cylinder, then I began slowly changing the cylinder's height. "Going down!" I shouted to the relieved passengers. Before long, the cylinder was only a few feet tall, then a few inches, then it was at ground level. I figured the firefighters could take it from here. Now, to finish off that monster!

Reading Practice Test, Form A

1. Why does the narrator compare the scene he finds himself in to a monster movie?

- A. The scene is sad.
- B. The scene is realistic.
- C. The scene is common.
- D. The scene is exciting.

2. Which of the following best describes the narrator's personality?

- A. He is clever and brave.
- B. He is angry and mysterious.
- C. He is scared and panicked.
- D. He is nervous and weak.

3. The author most likely got the idea for this passage from

- A. a math problem.
- B. a dramatic book.
- C. a comic book.
- D. a photograph of a superhero.

4. If you did not know the meaning of gleaming in paragraph 2, what should you do?

- A. Decide which part of speech the word is.
- B. Look at the other words in the sentence for clues.
- C. Read on without thinking about the word.
- D. Look for other words that sound the same.

5. Which of these is the best example of imagery?

- A. "In the distance, a skyscraper coughed out smoke in a long, black column rising to the sun."
- B. "This seemed to make him furious!"
- C. "I swooped up on the disk and out of the alleyway."
- D. "Now I had two tasks: defeat the monster and rescue those people."

6. How does the Geometer get rid of the creature and save the people?

- A. by talking the creature into leaving the building alone
- B. by using his mind to create geometric shapes
- C. by attacking the creature with the Cosmic Protractor
- D. by using his amazingly strong body to fight the creature

7. Which of these has the same meaning as fragile as used in paragraph 5?

- A. weak
- B. strong
- C. skinny
- D. breakable

8. What does the Geometer do after realizing the building's stairs are knocked out?

- A. He flies the people to safety on his flying circle.
- B. He creates a cylinder shape to get people to safety.
- C. He traps the giant monster in a sphere he created.
- D. He changes the cylinder's shape so people get down safely.

8th Grade Writing Alternative Instruction: Day 1

Directions:

Read the article "Should cities be allowed to take down Confederate monuments?" Use the information in the article to fill out the information on the rest of this page.

1. List three arguments from the article that are FOR the removal of Confederate statues.

1. _____

2. _____

3. _____

2. List three arguments from the article that are AGAINST the removal of Confederate statues.

1. _____

2. _____

3. _____

3. Choose whether you are FOR or AGAINST the removal of Confederate statues. On the back of this page, write a 3 PARAGRAPH essay with an introduction, a body, and a conclusion on which side you support. Use arguments from the article as well as your own arguments to support your opinion.

PRO/CON: Should cities be allowed to take down Confederate monuments?

By Mitch Landrieu, Washington Post, and Alfred L. Brophy, The Conversation, adapted by Newsela staff on 05.16.17

Word Count 1,623

Level 1100L



Workers prepare to take down the Jefferson Davis statue in New Orleans, Louisiana, May 11, 2017. This was the second of four Confederate monuments slated for removal in a contentious process that has sparked protests from both sides. Davis served as president of the Confederate States of America during the Civil War. AP Photo

PRO: These monuments should be removed because they honor slavery and segregation

Last month, New Orleans began the long-overdue process of removing four statues honoring the lost, and immoral, Confederate cause. This week, we continue the job.

Getting here wasn't easy. It took a two-year review process, a City Council vote and victories over multiple legal challenges. The original firm we'd hired to remove the monuments backed out after receiving death threats and having one employee's car set ablaze. Nearly every heavy-crane company in southern Louisiana has received threats from opponents.

Some have compared these monuments to other monuments around the world from bygone eras. They say that taxes would be better spent trying to educate the public about the history behind the monuments. Respectfully, that's not the point. As mayor, I must consider their impact on our entire city. It's my job to look forward, not simply to worship the past.

More than almost any other city in the world, New Orleans is truly a city of many nations. Our city is an intersection of humanity in all its colors and cultures: we have the native Choctaw, Houma Nation and Chitimacha tribes, and we have the Acadians, the Haitians, the Senegambians and other African nations. We also have the French and Spanish Empires, and ultimately the United States. In recent decades, our Vietnamese and Latino communities have flourished. We are a melting pot, a gumbo, and that is our strength.

No Need To Exalt The Ugliest Chapters Of History

But New Orleans was also America's largest slave market: a port where hundreds of thousands of souls were brought, sold and shipped up the Mississippi River to lives of misery and torture. Our history is forever intertwined with that of our great nation — including its most terrible sins. We must always remember our history and learn from it. However, that doesn't mean we must exalt the ugliest chapters, as we do when we raise the Confederacy up on a pedestal — literally — in our most prominent public places.

New Orleans' statues of Robert E. Lee, Jefferson Davis and P.G.T. Beauregard — all Confederate leaders during the Civil War — were built with the goal of rewriting history. They hoped to glorify the Confederacy and maintain the idea that whites are superior to other races.

These monuments could be used as places to mourn of our past of slavery and segregation. Instead, they honor it. They are an inaccurate representation of our past, an insult to our present and a poor prescription for our future.

The right way, then, is to do away with these symbols of injustice.

Monument Honoring Killers Was Taken Down

The Battle of Liberty Place monument was built here to honor the Crescent City White League. In 1874, the league's members killed many New Orleans law enforcement officers and state militia members, who came from many different races and backgrounds. Instead of honoring the officers, it honored the killers. That kind of "honor" has no place in an American city. So, last month, we took the monument down.

This week, we began the removal of a statue honoring Davis, and Lee and Beauregard soon after. It won't erase history. But it can begin a new chapter of New Orleans' history by placing these monuments, and the history of cruel treatment they represent, in museums and other spaces where they can be viewed in an appropriate educational setting.

Great nations become lost, isolated and ultimately extinct by refusing to confront the sins of the past. They must evolve to meet the demands of a changing world. If we don't want to be forever held back by our crushing history of institutional racism, it's time to put these monuments in their proper place.

Block Was Commemorated For The Wrong Reason

Last year, President Barack Obama opened the Smithsonian's National Museum of African American History and Culture. He spoke of the need to remember our history through one of the museum's most telling artifacts: a slave auction block, a stage where people once used to bid on slaves and purchase them. The block has a marker noting that famed American leaders Andrew Jackson and Henry Clay had once spoken on it.

"For a long time, the singular thing we once chose to commemorate as history, with a plaque," Obama said, "were the unmemorable speeches of two powerful men," he said. The plaque did not remember the families "sold and bid like cattle" on that same spot.

Just like the decision to publicly recognize the tragic significance of that stone, removing New Orleans' Confederate monuments from places of prominence is an acknowledgment that it is time to absorb, and then move past, a painful part of our history. Doing anything less would wash away generations of courageous struggle and soul-searching.

Mitch Landrieu is the mayor of New Orleans. He wrote this op-ed for the Washington Post.

CON: Confederate monuments should stay because they connect past racial crimes to current racial inequality

On April 24, New Orleans city employees began the process of removing four Confederate monuments. But there are downsides in eliminating memorials to the Confederacy — statues and monuments, along with the buildings, parks, schools and military bases named after Confederate soldiers. Mainly, we risk forgetting the connections of past racial crimes to current racial inequality.

Statues of Confederate soldiers are common in the South in a number of courthouse squares, and streets and parks bear the names of people or events associated with the Confederacy.

In Southampton, Virginia, Black Head Signpost Road is named for the head of a slave who was killed during the Nat Turner Rebellion. His head was put on a post along the road as a warning. Jefferson Davis Memorial Highway, which runs from Florida to California, was named in the 1920s.

In prior years, some cities and institutions have responded to the concerns of those who see these monuments as symbols of discrimination and oppression. In little towns throughout the South, Confederate statues have been moved from courthouse squares and town centers to less prominent places, like cemeteries. Meanwhile, buildings named after Confederate officers and members of the Ku Klux Klan group have been renamed.

Statues Removed And Buildings Renamed

In recent years, the call to remove or rename is getting even louder. In 2015, Senator Mitch McConnell said Kentucky should consider ridding the Kentucky State House of its Jefferson Davis statue. In Memphis, one City Council member drew up a law to remove the statue of Confederate officer and Ku Klux Klan member Nathan Bedford Forrest from a public park.

Some monuments may be so offensive to the local community that they'll need to be removed. And certainly, they can serve as rallying places for today's white supremacists. Others are particularly moving reminders of the days of slavery and Jim Crow.

Nathan Bedford Forrest Park, in an African-American section of Memphis, was renamed because the City Council thought it was an insult to the local population. In such cases, removing or renaming these monuments may serve to stop a continuing harm.

Four States Passed Heritage Protection Acts

This is a decision that should largely be made at the local level. However, the legislatures of four states — South Carolina, Georgia, Mississippi and Tennessee — have passed Heritage Protection Acts that prohibit the removal of Confederate monuments from public property or renaming of public buildings.

This movement started in South Carolina in 2000, and the statues were pushed by supporters of Confederate heritage.

However, while I'm no supporter of the Confederacy, there are several reasons not to remove monuments or rename buildings.

As an aside: Confederate flags are entirely different. New flags have to be put up constantly because they can wear out quickly. Thus, flying a Confederate flag shows a continuing commitment to maintaining a symbol of white supremacy. Confederate monuments, on the other hand, were almost all erected decades ago.

An Important Part Of Our Nation's History

For this reason, they're part of our landscape. Yes, they're reminders of the days of slavery and secession. But they teach important lessons — they point to a Southern political system that, from the 1870s to the 1930s, continued to support the ideals of the Confederacy. They're visual reminders of Jim Crow, and the ways white supremacy was brought to life through laws,

social practices and stone. And they reveal the thinking, however wrong, of a time and people: the fact that white Southerners and their elected leaders believed in the goodness of their society.

Ultimately, removal of the monuments will, quite literally, erase an unsavory — but important — part of our nation's history.

There's a second reason to go slow on renaming. It's important for individuals, as well as communities, to understand how our past is connected to the present.

A Connection Between Past And Present

The eras of slavery and Jim Crow left behind a legacy of violence and limited educational and job opportunities. Those times are past, but they are undeniably connected to the fact that one-third of African-American children today live in poverty.

Many people argue that the government should give more money to social welfare programs to lessen the problems of poverty. These people say that poverty is related not to mistakes an individual made, but to histories of racism that have lasted for generations. Confederate statues are real-world symbols of this history of cruel treatment.

They're another reminder of the need to be careful in how we tell our nation's history. In understanding how we got to where we are today, we need to acknowledge the good along with the bad — which means not tearing it down.

Alfred L. Brophy teaches and writes about the history of law at the University of North Carolina School of Law in Chapel Hill.