



# PRO VIRILI PARTE

## P • A • P • E • R • S

Commemorating the 100<sup>th</sup> Anniversary of  
Birmingham University School

Issue No. 2

### The Legacy of Captain Robert Louis Johnson (1929-1945)

By Amanda Neel Davis

Early on Monday morning, October 28, 1929, boys were bicycling and walking along Highland Avenue toward the B.U.S. school building for another week of studies. However, on that very same morning, many miles away in New York City, events were unfolding that would change B.U.S., Birmingham, and the entire nation forever. Since the spring of 1928, stock prices had been rising steadily but fell dramatically on Friday, October 24, 1929. Despite the efforts of large national banks to turn things back around, on Monday the market crashed.<sup>1</sup> By the time the B.U.S. boys left school that day the Dow Jones Industrial Average had lost 13% of its value. Stock prices for U.S. Steel, the largest employer in Alabama, were 110 points below those of September 1928. When Franklin Roosevelt delivered his first inaugural address on March 4, 1933, the President described Birmingham as “the worst-hit town in the country.”<sup>2</sup>

From a peak enrollment of 78 students in 1927, fewer than 50 students matriculated at B.U.S. during the Depression years.<sup>3</sup> Thus, Captain Parks was forced to let some of the faculty go, and others left of their own volition. Even though B.U.S was suffering student and faculty losses, a big gain was the arrival of Captain Robert Louis Johnson. Born in Wetumpka, Alabama in 1896, Johnson enrolled in Marion Institute’s Army-Navy College at the age of 16. After successfully completing the program, he headed north to the United States Naval Academy in Annapolis, Maryland. But unfortunately, he was forced to leave after two years due to deteriorating eyesight. He returned to teach at Marion until the U.S. entered World War I. He then enlisted in the army as a lieutenant, but just before the division left for France, he was promoted to captain and given command



<sup>1</sup> Thomas p 31

<sup>2</sup> Thomas, p. 33

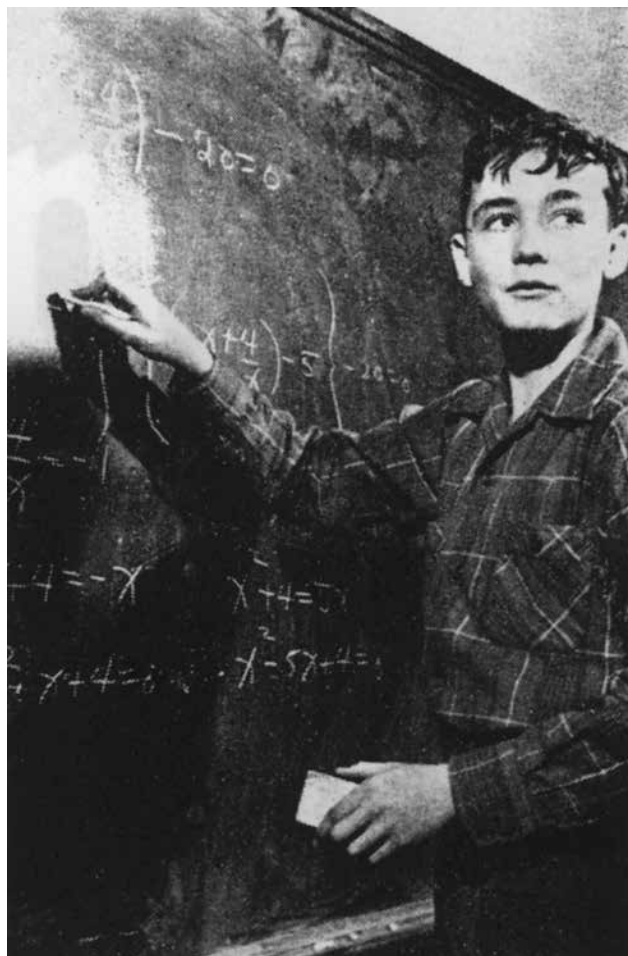
<sup>3</sup> Thomas, p. 33

of his own company. After various post-war pursuits, he arrived in Birmingham in 1929 to teach math and physics at B.U.S.<sup>4</sup>

## College Preparatory Mathematics

When Chris Thomas wrote his book, he interviewed and/or corresponded with 15 or so of Johnson's former students. Every single one of them said he was among the best teachers, if not *the* best teacher, they ever had – in any subject, at any school and at any level – including professors at universities like Virginia, Princeton, and Yale. Johnson's gifts in teaching mathematics were exceptional and probably unique in Alabama in 1929. Carrying on the practice introduced by Captain Parks, Johnson drilled his students daily in mental arithmetic and held frequent classroom competitions. For solving multi-step problems, the chalkboard became the teaching platform. Johnson taught the boys to write on the board with one hand and erase with the other. If a student made a mistake on blackboard work, Johnson would hurl a piece of chalk at the incorrect figures and yell something to the effect of "Keep your brain ahead of your chalk!"<sup>5</sup>

Former student, Hobart McWhorter, explained that Johnson had a way of communicating "the big picture" of mathematics with his students. Johnson emphasized ingenuity rather than just using memorized procedures and would remind his students about the importance of estimating the answer. For those who made it through Captain Johnson's exacting courses, college-level mathematics became much easier. Another student bragged, "I didn't have to crack a book in math my freshman year."<sup>6</sup>



Edward Rushton at the board. Per Johnson's direction the chalk was in one hand and the eraser in the other.

## Challenging Exams

Johnson's exams were notoriously challenging as we can see by looking at a copy of one of his hand-written exams, which was preserved by Thad Holt and is now a part of Altamont's B.U.S. archives. Johnson was a stickler for following rules and honesty, both of which were expected of all B.U.S. boys. Jimmy Shepherd recalls getting back an exam where Johnson had given him credit for a wrong answer. Shepherd then pointed out to Johnson the mistake on his paper hoping Johnson would not lower his score – but no – 4 points off! There was also friendly competition between students – sometimes within a family.

Allen Rushton remembered frequently competing with his cousin, Billy Rushton. But alas! Billy was the usual winner. However, one day Allen received his paper back with a score of 96 and noticed that 4 points had been taken off – not because the answer was wrong but because the problem had not been

<sup>4</sup> Thomas p 37.

<sup>5</sup> Thomas, p.50

<sup>6</sup> Thomas, p. 50

1. Solve:  $\sqrt{4x^2 + 2x + 7} = 12x^2 + 6x - 119$ .
2. Find the 4th root of  $\frac{3}{2}\sqrt{5} + 3\frac{1}{2}$ .
3. Simplify:  $\left(x + y - \frac{1}{x + y - \frac{xy}{x + y}}\right) \div \frac{x^2 - y^2}{x^3 - y^3}$ .
4. Solve:  $6x^4 + 29x^3 + 30x^2 - 11x - 6 = 0$ .
5. Without forming the equation, find the coefficient of  $x$  in the equation whose roots are 2, 3, -1, -4.
6. Train B leaves P for Q, 240 miles away, 1 hour after train A, and in 2 hours reaches a point that train A had passed 45 minutes earlier. B's rate was then increased by 5 m. p. h., and the trains arrived at Q at the same time. Find the rate at which each train started.
7. What is the probability that there will be a majority of men on a committee of 3, chosen by lot from 5 men and 3 women?
8. If 4 dimes and 3 nickels are placed at random in a straight line, what is the chance that the end coins will both be nickels?
9. If all the 4-letter combinations possible are made from the alphabet, no letter used more than once in any combination, what is the chance that  $x$  is in any combination chosen at random?
10. In how many ways can 3 coins be given away if there are 6 possible recipients?

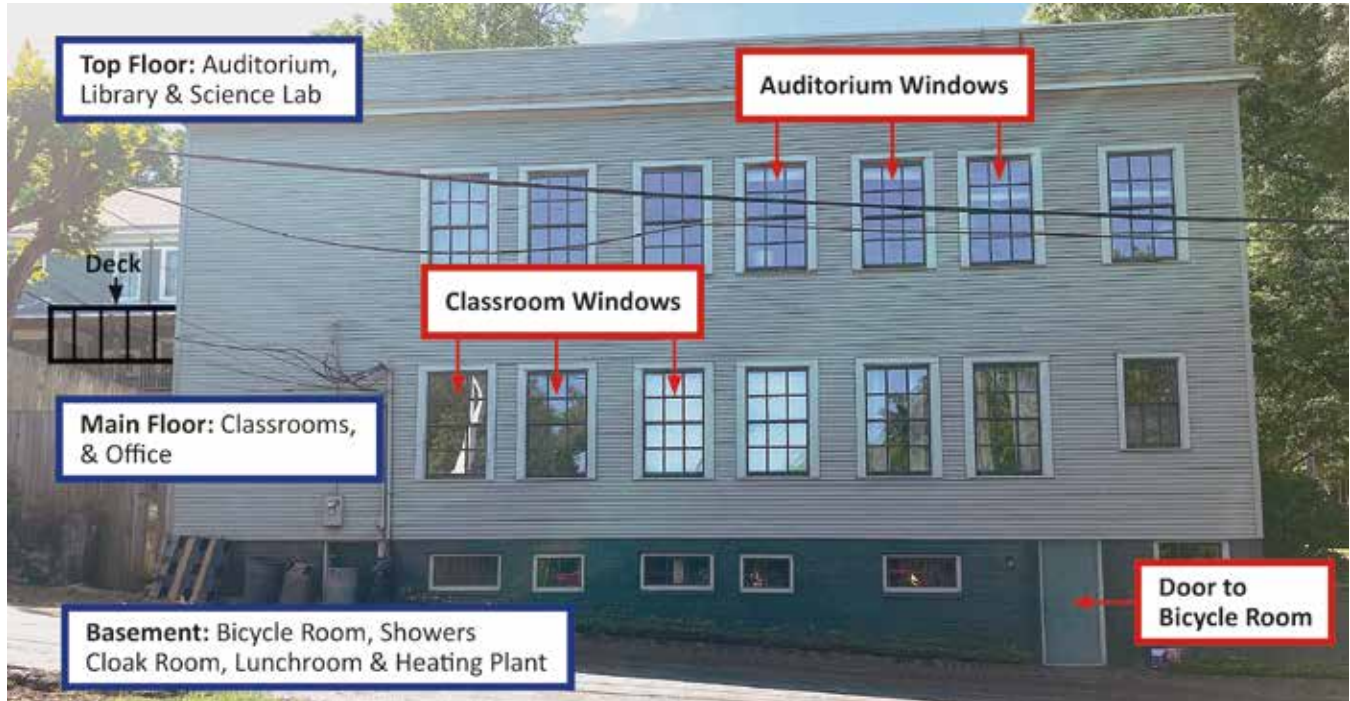


worked in the proscribed way. Allen then showed Johnson his paper and explained that the computation was based on a “short cut,” which Johnson, himself, had told the class about earlier in the year. Allen remembered that Johnson immediately re-awarded him the four points. Thus, on that day, both Allen and Billy received perfect scores of 100.<sup>7</sup>

Like Captain Parks, Captain Johnson emphasized personal best rather than competition. He praised students whose work showed effort and was most critical of those who did not try. Additionally, Johnson was not averse to capitalizing on teachable moments – even during tests. When walking around the classroom and seeing a mistake on a student’s test paper, he would tap him on the shoulder and say, “You might want to rethink that answer.”

## Window Escapes

While he could be a harsh disciplinarian, Johnson’s students were quick to defend him as being fair. And, of course, in the 1930s and 1940s, corporal punishment was perfectly acceptable. Even so, Johnson liked to incorporate a degree of sportsmanship” into his discipline. If an offender could escape out a window and then make the leap onto the alley adjacent to the school building, Johnson would grant him absolution. Woe be unto the student, however, who was not quick enough to make an escape. Caldwell Marks remembered one afternoon when his classmate, Tony Marzoni, was bending down over Johnson’s desk and they were talking about his math paper. Marks was standing behind Marzoni, probably waiting in line to discuss his own paper with the Captain. Marzoni’s position was just too inviting, and Marks stuck him in the rear end with a sharpened pencil. Marzoni poured forth a string of obscenities, so now both boys were in trouble. Then, Marks managed to escape, but Johnson’s strong arms pulled poor Tony Marzoni back inside the window where he was forced to accept his punishment.<sup>8</sup>



<sup>7</sup> Thomas, page 51

<sup>8</sup> Thomas, p. 39 from interviews with Caldwell Marks and Pete McGriff

## Headmaster 1936-1945

Captain Johnson became headmaster when Basil Parks, the founding headmaster, was called back into military service with the Army Corps of Engineers. As it turned out, Parks's term as headmaster (1922-1936) transitioned naturally into Johnson's term.<sup>9</sup> By 1936, the boys who attended B.U.S. in the 1920s and early 1930s had moved ahead in their lives, but the B.U. S. boys of the late 1930s and early 1940s became Captain Johnson's disciples. As James Simpson said, "Captain Johnson was not only the headmaster; he was the school's very soul, its personification." Johnson's reputation as a great math teacher also brought new students to B.U.S.

In the early 1940s, Johnson was able to hire new teachers and field the school's first interscholastic athletic teams in basketball and football. He recruited a Birmingham-Southern basketball player to teach the boys some basic plays, and the team participated in a league of 12- and 13-year-olds, which played their games on Saturdays at the downtown YMCA. The first B.U.S. football game was held at the Mountain Brook athletic field on Cahaba Road. Hobart McWhorter recounted the story of a player next to him on the front line at the kickoff who was so nervous he vomited. Neither the football nor basketball teams of that era could boast of many wins, but they always had the support of Captain Johnson who cheered them at every game. After all, they were his boys – they loved him, and he loved them.<sup>10</sup> Surprisingly, McWhorter would soon have football success at Phillips Exeter Academy. And, much later, in 1970, a B.U.S. basketball team would be in the state's final-four playoffs.<sup>11</sup>

## The World War II Years

During World War II, it was pretty much business as usual for the boys who had not graduated, but students did recount specific wartime memories. They were able to locate places American troops were going all over the globe – Tunisia, Salerno, Leyte, Luzon. Other students remember collecting scrap metal and rubber for the war effort, as well as watching military convoys make their way past the school on Highland Avenue. The wartime gas rationing transformed Jimmy Shepherd's light blue Hudson into a "school bus." In the mornings, boys who lived near Shepherd would frequently pile in and pick up others along the way. Then, when he turned down 28<sup>th</sup> Street off Niazuma Avenue, Shepherd would coast down to the school to save fuel.

Of those students from the 1920s and 1930s who had already graduated, most would serve in the armed forces in some capacity during the war. Lee "Pete" McGriff became a fighter pilot in the Navy. Bill Spencer and Peterson Marzoni served as officers in the Marines. Spencer, participated in all five of the 2<sup>nd</sup> Marine Division's major landings at Tarawa, Saipan, Okinawa, and Iheya Shima. Herbert Smith saw action with the U.S. army in virtually every European campaign, and Elbert Jemison, Jr. served with Patton's 3<sup>rd</sup> Army in northwest Europe. Caldwell Marks served on a destroyer in the Atlantic and Mediterranean, as well as participated in the capture of U-505 off the coast of Rio de Oro in June of 1944.<sup>12</sup> Unfortunately, Joe Barker and Page Hill (both of whom appear in the 1927 school picture) were killed in World War II. Joe Barker died leading guerilla activities against the Japanese. Page Hill was killed when a Japanese submarine torpedoed the USS Indianapolis on July 30, 1945.<sup>13</sup>

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<sup>9</sup> Thomas, p. 42

<sup>10</sup> Thomas. P. 50-52

<sup>11</sup> Thomas, p.102

<sup>12</sup> Thomas, p. 43-45

<sup>13</sup> Nelson Page Hill, Jr. was son of one of the most successful grocery-store owners in Birmingham at that time. His daughter, Leigh Hill Allison, was a graduate of Brooke Hill. During the 1950s and 1960s, his brother-in-law, Beverly P. Head, Jr. was instrumental in the B.U.S. story. His daughter Jane Head Johnson was in the Brooke Hill Class of 1966. Mr. Head's grandchildren, Barton Head, Hillery Head, and Maye Head Frei were Altamont graduates. His great-granddaughter, Mimi Frei, will graduate from Altamont in 2023.

During the winter of 1944 – 1945, Allied troops were on their way to victory in Europe, but back in Birmingham, January 2, 1945, was a cold, grim day. In anticipation of the boys' return to school after the Christmas holidays, the school janitor Elijah Frazier came in early to fire up the boilers. When entered the basement, he saw Captain Johnson lying unconscious on the couch with a head wound and a .38 caliber revolver in his hand. He was rushed to Hillman Hospital but died in the early morning hours of January 3. There was speculation about the cause of Johnson's death, but no one really knew what happened to their beloved teacher and headmaster. Thomas points out in his book that there was a history of depression and suicide in his family. However, as would be expected, Johnson left his affairs in perfect order. He was buried in his hometown of Wetumpka, Alabama on January 6, 1945.<sup>14</sup>

In the 1920s, the Birmingham University School started out strong with the superior leadership Basil Parks, but the depressed economy of the 1930s brought on enrollment and financial challenges. Even so, throughout the early 1940s, Captain Johnson's gifts for teaching mathematics had attracted new students to the school, but Johnson's suicide in the basement of the school building again brought on a drop in enrollment.

In the Fall of 1945, the boys who had been at B.U.S. during the World War II years, would now move on to the next chapter of their lives. Even so, Johnson's legacy would remain in the hearts and minds of the boys he loved so dearly. Jimmy Shepherd would go to Virginia Military Academy at the age of sixteen.<sup>15</sup> Billy Rushton, Allen Rushton, and Hobart McWhorter would distinguish themselves at Philips Exeter Academy in New Hampshire, where they became known as "the math wizzes from Alabama." Bill Matthews, whose grandfather J.T. Murfee founded Marion Military Institute, would complete high school at Marion and then go on to Georgia Tech.<sup>16</sup> Furthermore, as 1950 approached Birmingham's demographics were changing quickly and dramatically. One of the distinctive geographical features of this New-South city (founded only 50 years before B.U.S) was its mountain crests and valleys. After World War II, new homes were being built at an astonishing rate on the other side of Red Mountain – in Shades Valley and



Captain Johnson teaching class, 1942 (*Alabama Magazine*)

<sup>14</sup> Thomas, pages 52-53

<sup>15</sup> Obituary, James Wylie Shepherd

<sup>16</sup> Thomas, page 55

on Shades Mountain. Thus, the original Highland Avenue location was no longer the right one for a boys' preparatory school, which needed athletic fields, a gymnasium, and other amenities to attract the interest of parents for their post-war baby boomers.

## The Captain's Centennial Math Competition

*"What made Captain Johnson so special was that he had a way of communicating to his students the big picture of mathematics so that they understood it at a very fundamental level."*

– Hobart McWhorter –

Just as Hobart McWhorter said so succinctly, Captain Johnson was a great teacher because he knew the importance seeing the big picture, beginning with a deep understanding of the basics. In that spirit, problems to solve for the Captain's Centennial Math Competition were pulled from one of his notoriously difficult exams.

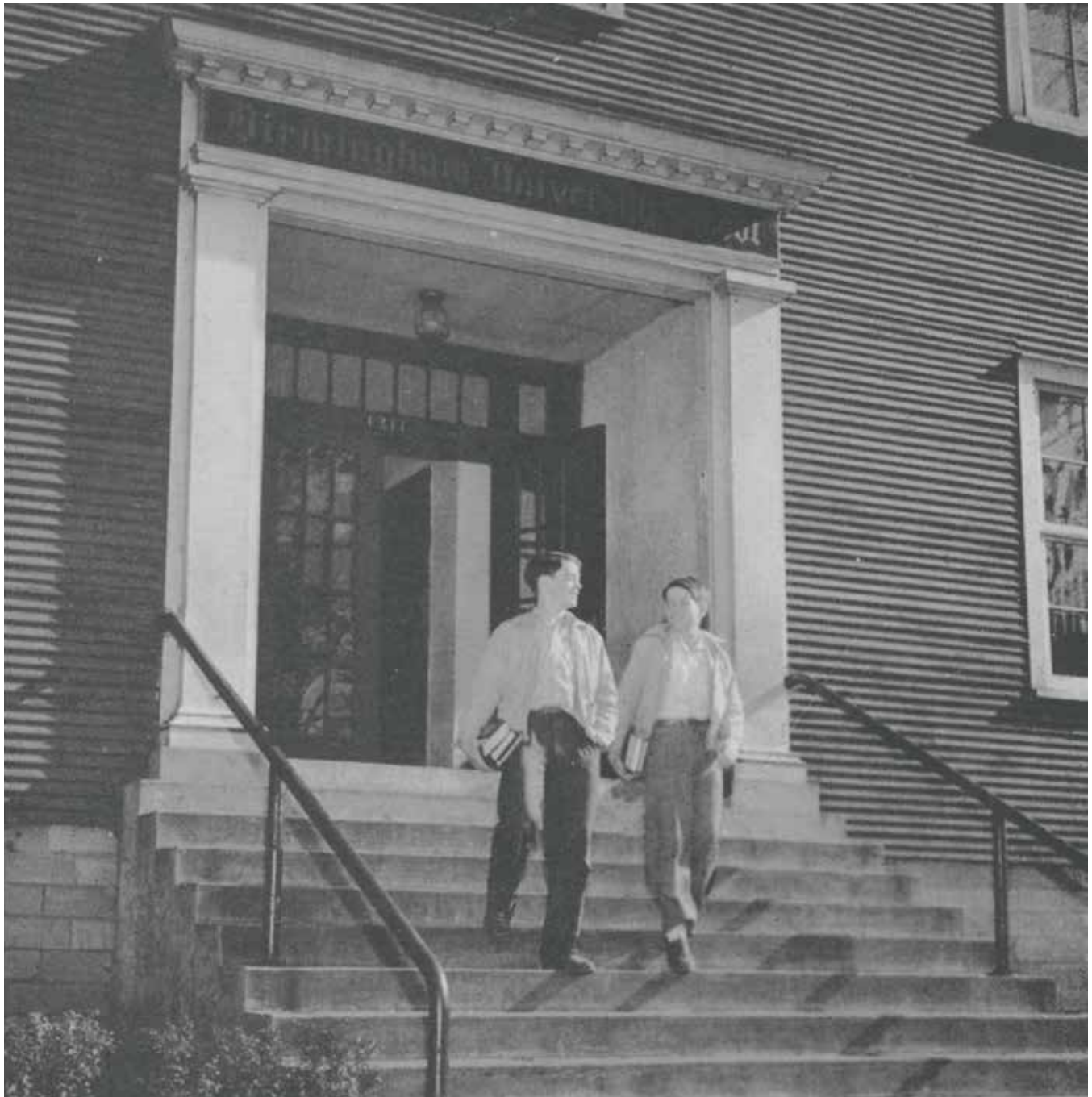
### Centennial Math Competition Problems

1. Train B leaves P for Q, 240 miles away, one hour after Train A. In two hours, Train B reaches a point that Train A had passed 45 minutes earlier. B's rate was then increased by 5 miles per hour, and the trains arrived at Q at the same time. Find the rate at which each train started.
2. What is the probability that there will be a majority of men on a committee of three, chosen by lot from 5 men and 3 women?
3. If 4 dimes and 3 nickels are placed at random in a straight line, what is the chance that the coins at both ends will both be nickels?
4. If all the 4-letter combinations possible are made from the alphabet (no letter used more than once in any combination), what is the chance that x is any combination chosen at random?
5. In how many ways can 3 coins be given away if there are 6 possible recipients.

### The Rules

- Open to all B.U.S., Brooke Hill, and Altamont Alumni
- Open to current Altamont students, faculty, staff, and parents
- Participants must provide the correct answer and solution explanations
- Participants may work alone or in teams
- There will be prizes for correct (explained) solutions
- Solutions should be submitted by mail, hand-delivered to Altamont School, or Emailed to [100years@altamontschool.org](mailto:100years@altamontschool.org).





Billy and Bland Wilson leaving school c. 1940 (*Alabama Magazine*)



## The Altamont School

4801 Altamont Road | Birmingham, AL 35222

[www.altamontschool.org](http://www.altamontschool.org) | 205-879-2006

The mission of the Altamont School is to improve the fabric of society by graduating well-educated individuals capable of independent thinking and innovative ideas. To this end, the school attracts, nurtures, and challenges students whose commitment to truth, knowledge, and honor will prepare them not only for the most rigorous college programs but also for productive lives.