

CALCULUS HOWARD ANTON 5TH EDITION#WGVS=E

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What calculus book does Harvard use? Apostol, Calculus by M. Spivak, and Pure Mathematics by G.

Is Anton calculus good? This is really a great book. I learned calculus from this book 20 years ago, and now, as I relearn it, I use it again. The writing is clear, and the examples progress from the easy to the difficult.

What calculus did Einstein use? Note that while Newtonian physics (as in classical physics) often used 3-dimensional, multi-variable calculus, with x , y , z variables and x , y , z planes for instance, some Einsteinian physics required multi-variable calculus -at a level of 5-dimensions.

What is the hardest math in Harvard? In the past, Harvard University's Department of Mathematics had described Math 55 as "probably the most difficult undergraduate math class in the country." But Math 55 lecturer for 2022 Professor Denis Auroux clarified that "if you're reasonably good at math, you love it, and you have lots of time to devote to it, then ...

Who is known as God of calculus? Mohit Tyagi Sir is very famous for his maths and tricks and techs in it. Yes, it's true he is called god of calculus bcoz of the following reason and this thing also inspired me a lot and I have seen all his lectures of calculus on his YouTube channel:- 1.

Is calculus the hardest math? Calculus is widely regarded as a very hard math class, and with good reason. The concepts take you far beyond the comfortable realms of algebra and geometry that you've explored in previous courses. Calculus

asks you to think in ways that are more abstract, requiring more imagination.

Who is the real father of calculus? Calculus is commonly accepted to have been created twice, independently, by two of the seventeenth century's brightest minds: Sir Isaac Newton of gravitational fame, and the philosopher and mathematician Gottfried Leibniz.

Did Benjamin Franklin know calculus? Although Franklin did not do calculus he knew of it at least since 1725 at the age of 19.

Who uses calculus the most? Engineering: Not one of the fields in engineering would probably exist today if there was no calculus. A few examples are structural, civil, electrical, mechanical, chemical, and biomedical engineers all making use of calculus.

What did Isaac Newton say about calculus? Newton came to calculus as part of his investigations in physics and geometry. He viewed calculus as the scientific description of the generation of motion and magnitudes.

What is the hardest math on earth?

What comes after calculus? After completing Calculus I and II, you may continue to Calculus III, Linear Algebra, and Differential Equations. These three may be taken in any order that fits your schedule, but the listed order is most common.

What is the hardest math degree in the world? Part III of the Mathematical Tripos (officially Master of Mathematics/Master of Advanced Study) is a one-year master's-level taught course in mathematics offered at the Faculty of Mathematics, University of Cambridge. It is regarded as one of the most difficult and intensive mathematics courses in the world.

Who taught himself calculus? In the early 1930s Richard Feynman's high school did not offer any courses on calculus. He decided to teach himself calculus and read Calculus for the Practical Man and took meticulous notes.

Who was the inventor of math? So, nobody is called an inventor of mathematics. But Archimedes is regarded as the founding figure of mathematics. But the question of who created mathematics has no clear answer. Greek mathematicians were the

first to share their discovery of mathematics with the rest of the world.

Who was the first person to do calculus? Today it is generally believed that calculus was discovered independently in the late 17th century by two great mathematicians: Isaac Newton and Gottfried Leibniz. However, the dispute over who first discovered calculus became a major scandal around the turn of the 18th century.

Which is harder, chemistry or calculus? But for what it's worth, I found calculus to be much easier than chemistry. Calculus involves a small handful of ideas that find applications in enormous giant-hand-handfuls of situations. But if you know those small handful of ideas, the applicatio...

Why do people struggle with calculus? Most of the reasons students have difficulty learning calculus is because they don't study daily after lessons, can't focus in class, have gaps in their math knowledge, and think learning calculus is a waste of time. Here are the steps you can take to make calculus a breeze: Stay curious. Ask questions.

Is calculus harder than trigonometry? Calculus often presents more abstract and challenging problems, which may partially explain why it is considered the more difficult of the two courses. Regardless of which course you choose, remember to dedicate time to practicing problems and seeking help from your teacher or peers when necessary.

Did Einstein know calculus? Between the age of 12 and 16, Einstein had already taught himself calculus. In 1949 Einstein wrote in his Autobiographical Notes: "At the age of twelve through sixteen, I familiarized myself with the elements of mathematics, including the principles of differential and integral calculus.

Who is the youngest person to do calculus? Feynmann did it when he was 14. Einstein did it when he was 12. And by far, the person who's learned calculus at the earliest age (that I'm aware of) was Terence Tao. This guy learned calculus when he was 7.

Who invented pi? Archimedes developed the polygonal approach to approximating π . The first recorded algorithm for rigorously calculating the value of π was a

geometrical approach using polygons, devised around 250 BC by the Greek mathematician Archimedes, implementing the method of exhaustion.

What is the best calculus workbook?

What books do Harvard students read?

Does Harvard teach calculus? This is an introduction to calculus. I have taught this class from 2011-2014 from 2020-2021 and in the spring 2024 at the Harvard college.

Does Harvard require calculus? Students' math records are viewed holistically, and no specific course is required. Specifically, calculus is not a requirement for admission to Harvard.

What is the best calculus book for self-study?

Which Calc is the hardest? Calculus 2 is harder for a few reasons: There is no central theme. Calculus 1 is about differentiation, and integration, and ends with the fundamental theorem, unifying the two subjects. Calculus 3 is about studying calculus in higher dimensions, and generalizing the fundamental theorem over and over.

Which part of calculus is the most difficult?

What is the hardest thing to study at Harvard?

What is the most popular subject at Harvard? The most popular majors at Harvard University include: Social Sciences, General; Biology/Biological Sciences, General; Mathematics, General; Computer and Information Sciences, General; History, General; Physical Sciences, General; Engineering, General; Psychology, General; Visual and Performing Arts, General; and ...

Can the public go to Harvard Library? While our libraries primarily serve the Harvard community, we strive to make our world-class research resources available to as many researchers as we can. There are plenty of opportunities for visitors to experience our collections. Harvard ID holders may bring up to four guests into Widener Library.

What is the hardest math class at Harvard?

How hard is college level calculus? If you ask any university math student what topic they find most challenging, you can expect that the answer for an overwhelming majority will be calculus. It's not at all uncommon for a student to get top grades in almost all of their exams only to be disappointed by the result they receive in calculus.

What grade is calculus taught in us? Calculus is usually taken by high-school seniors or university freshmen, but can occasionally be taken as early as tenth grade.

Can I go to Harvard even if I'm poor? A lack of financial resources or need for financial aid are not impediments to your admission.

What GPA is required for Harvard? In truth, you need close to a 4.0 unweighted GPA to get into Harvard. That means nearly straight As in every class while also taking the highest rigor classes available at your high school.

What is the hardest college to get into? The answer to what college has the lowest acceptance rate is the same as what ivy league college has the lowest acceptance rate: Harvard. While all Ivies are known for having some of the lowest college acceptance rates of all colleges, Harvard has generally been the most selective.

What is the theory of nationalism by Ernest Gellner? Deep Dive: Ernest Gellner's theory implies that nationalism is a product of modernity. He posits that the state and nationalism are inseparably intertwined, with the state striving for cultural homogeneity to promote and maintain social order in an industrial society, thereby nurturing nationalism.

What are the modernist theories about the emergence of nations and nationalism? Processes that lead to the emergence of nationalism include industrialization and democratic revolutions. Modernization theory stands in contrast to primordialism, which hold that nations are biological, innate phenomena, and ethnosymbolism, which emphasizes their pre-modern roots.

Who created the theory of nationalism? Gellner's theory of nationalism was developed by Ernest Gellner over a number of publications from around the early

1960s to his 1995 death. Gellner discussed nationalism in a number of works, starting with *Thought and Change* (1964), and he most notably developed it in *Nations and Nationalism* (1983).

What do modernists mean by nationalism? Modernists argue that nationalism is the product of the specific effects of the modern age, dating roughly to the late Enlightenment or to the French Revolution specifically. They also emphasize the role of the international system in the forging of national identity.

What is the concept of nationalism? Nationalism identifies the nation as the central form of community and elevates it to the object of supreme loyalty. This fundamental concern for the nation and its flourishing can be fragmented into narrower aims or objectives: national autonomy, national identity, and national unity.

What were the beliefs of nationalism? It holds that each nation should govern itself, free from outside interference (self-determination), that a nation is a natural and ideal basis for a polity, and that the nation is the only rightful source of political power.

What are the four theories of nationalism? The basic theories of nations that have been studied from the 19th century to the present day are primordialism, perennialism, ethno-symbolism and modernism.

What is the difference between non modernist and modernist theories of nationalism? The modernists look upon nationalism as a modern phenomenon and a product of not more than the last three centuries. On the other side of the divide are the non-modernists who refuse to privilege the modern period for an understanding of nationalism and instead look at the larger spread of time.

How do you explain modern nationalism? Modern Nationalism is an ideology that emphasizes loyalty, devotion, or allegiance to a nation or nation-state and holds that such obligations outweigh other individual or group interests.

Is Gellner a Marxist? Gellner's choice is a variety of democratic socialism. Gellner's social theory rests on two pillars: civil society and modernity. In both, Marxism has a stake.

Is Gellner a modernist? Ernest Gellner's is the best-known modernist explanatory theory of nationalism. This article summarizes its expression and development before considering its strengths and weaknesses.

What is the relationship between nation and nationalism theory? Nationhood refers to the status of belonging to a nation(-state) or to a national identity. Nationalism in turn can be defined as a set of beliefs and symbols expressing an identification with a given national community and efforts aimed at the establishment and/or maintenance of a sovereign nation-state.

What is the difference between nationalism and nation? Basically, if a group of people has a shared sense of nationalism, they form a “nation.” The idea of nationalism believes that once a group has defined itself as a nation they have a “natural right” to territory necessary to live in and govern in.

How did nationalism and the idea of nation emerge? In the 18th century, at the time of the French Revolution, the idea of a nation-state emerged for the first time. The middle people, which mainly consisted of laborers, realized a shared identity and advocated for national sovereignty. This is where the idea of nationalism emerged.

What was the modernist concept of nation? Modernist theories of nation formation are distinct from both primordialist and perennialist theories. The modernist position differs from the primordialist position in that it considers nations as forms of social cohesion which are by no means a matter of historical necessity.

What are wire wrapping techniques? In simple terms, wire wrapping is taking wire and wrapping it around itself and/or beads and other components to create jewelry. Wire wrapping can be used to make a loop for joining different components together, such as when creating a wrapped wire loop or wrapping a pendant.

Is wire wrapping hard to learn? Wire wrapping can be a challenging craft to learn, especially for beginners. The techniques can seem complicated, and it can be difficult to know where to start.

What gauge wire is good for wrapping? As a general rule, 28G-32G wire is best for wrapping beads with a width less than 3mm or 4mm in diameter. Most beads

larger than 4mm will accommodate 24G and 26G wire, so it is mostly down to personal preference when choosing between the two.

What size wire is best for wire wrapping? 24 gauge jewelry wire is a good all-purpose wire diameter. 24-gauge wire is fine enough to fit through most gemstone beads, and is durable enough to make good wire-wrapped loops.

What are the two basic wrapping techniques? There are 2 basic wrapping techniques: overlap (croquignole) and spiral.

What are the disadvantages of wire wrapping? A disadvantage of wrapped connections is the limited scope of applications. This method can be used only with single core wires with the diameter of 0.25 to 1mm with mounting pins. It is also necessary to adjust the ends of the wrapping tool to pin size and wire diameter.

What do I need to start wire wrapping?

Is wire wrapping worth it? Wire wrap is also very stable when exposed to temperature changes, corrosive atmospheres, humidity, and vibration. It is stronger than a solder connection. It is less easily stripped from the terminal, and is less subject to breakage. The connection can be removed quickly and easily, with no damage to the terminal.

What gauges for wire wrapping?

Is stainless steel wire good for wire wrapping? This is why I recommend using stainless steel for the earwires in this course. It's a little more expensive than aluminum or copper, but it lasts indefinitely (unless you submerge it in saltwater for a decade). That's why I won't say it's exactly good for beginners, but it's definitely acceptable.

How to bend wire into shapes?

What is the best wire to wrap crystals? Half-round and square wire are good for wrapping around stones, because the wire has a flat side that will not roll off the wire-wrapped object.

How much wire should you strip to wrap around the terminal?

What can I use to wrap wire? Chain nose pliers: with rounded outsides and flat facing jaws, tapering to a small point making them ideal for wrapping wire and closing jump rings.

How thick is a wire wrap? Wire wrapping wire usually has diameter from 0.25 mm to 1.5 mm. Depending on the thickness of the wires, it is generally agreed that delicate swirls and small flowers or ornaments are made of 0.2 mm-0.3 mm. Connectors for necklaces, bracelets and grapes earrings: 0.4 mm-0.5 mm.

What is the most common neutralizer? The most common neutralizer is hydrogen peroxide and the chemical process that removes the hydrogen atoms and reforms the disulfide bonds is called ?oxidation?.

What are the wrapping techniques? Take the edge of the wrapping paper and wrap it around the box so it covers about half the box. Then, roll the tube of the wrapping paper over the box all the way to the other end of the box. The box should now be completely covered in wrapping paper. Cut the paper so the wrapping paper overlaps.

Which method of wrapping provides the most control? Final answer: Flat end wraps provide the most control over hair ends by covering and smoothing them before rolling onto a perm rod, which prevents fishhooks and ensures a uniform curl pattern.

Why do electricians wrap copper wires with black plastic tape? The tape's adhesive side adheres firmly to itself when wrapped around wires, creating a secure and tight seal. This insulation helps to maintain the integrity of electrical circuits by guarding against exposure to moisture, dust, and other environmental factors.

Why do electricians always wrap wires in plastic? Answer: The electrical wire plastic coverings cannot transfer power, but electrical power can pass through our bodies. So, the plastic coverings can insulate the metal wire core from human body so as to protect our safety. (When the electricity reaches a certain range, it will cause damage to human body.

Is wrapping wires a fire hazard? Cord "Wrapping" Extension cords that are coiled up can create a fire hazard, even those fancy cord reels are at risk, because flowing

current generates heat, and when that heat cannot properly disperse because of the coiling, fires may occur.

What gauge wire to use for wire wrapping? 18 Gauge Wire It works well for making all types of hooks and clasps and for wire wrapping beads with large holes. It is used often when making ornate bracelets and when creating wire collars and heavier neck pieces.

How do you harden wire after wrapping? All you need to do is place your piece onto the steel block and use a hammer to gently tap the piece until it hardens. A rawhide mallet is great to use as it won't damage your work, a chasing hammer on the other hand will flatten your work slightly as well as harden it.

What pliers do you need for wire wrapping? What Tools Do You Need to Wire Wrap? To get started, you will need a few basic tools. These include flat-nose, chain-nose, and round-nose pliers, as well as flush cutters for soft wire. Read on to learn more about each of these tools.

Is wire wrapping still used? Wire-wrapping was also used by the Vikings and in many other ancient cultures. The technique has been passed down through generations, and it is still used today to create beautiful and unique jewelry.

What can you wrap wire with? Electrical tape is the generic name for adhesive insulation tape that is used for protecting and insulating wires or cables that conduct electricity. There are different types of electrical tape and here at cableties-online, we stock PVC insulation tape.

Why use wire wrap? Wire wrap is portable which means you can wrap wire while sitting on the couch watching TV or at your cubicle at work. It's also lead-free for all us greenies, and if you make a mistake, simply unwrap the wire and redo the connection.

What are the wrapping techniques? Take the edge of the wrapping paper and wrap it around the box so it covers about half the box. Then, roll the tube of the wrapping paper over the box all the way to the other end of the box. The box should now be completely covered in wrapping paper. Cut the paper so the wrapping paper overlaps.

What is the meaning of wire wrapping? Wire wrapping is one of the oldest techniques for making handmade jewelry. This technique is done with jewelry wire and findings similar to wire (for example, head-pins) to make components. Wire components are then connected to one another using mechanical techniques with no soldering or heating of the wire.

What are the techniques of wire sculpture? Wire sculptures can be made using various types of wire, including copper, aluminium, and steel. Wire sculptures can be created using a variety of techniques, including twisting, coiling, and weaving. Wire sculptures can be either freestanding or hung on a wall.

What is electrical wire wrapping? DISCRETE WIRING. SOLDERLESS WRAPPED ELECTRICAL CONNECTIONS-WIRE WRAP. WIRE WRAPPING. Solderless wrapped terminations are made by helically wrapping a solid uninsulated wire, around a specially designed termination post, to produce a mechanically and electrically stable connection.

What are the 4 main principles of wrap?

What are the 5 key concepts of wrap? offers self-reflections and questions based on the five key concepts of WRAP: hope, personal responsibility, self-advocacy, education, and support.

What are wrapping styles? Square: This style wraps the text around an object, creating a rectangular shape that fits around the object. Tight: This style wraps the text around an object, but it fits more closely to the edges of the object. Through: This style wraps the text around an object, so it appears to flow through the object.

What tools are needed for wire wrapping?

Is wire wrapping still used? Wire-wrapping was also used by the Vikings and in many other ancient cultures. The technique has been passed down through generations, and it is still used today to create beautiful and unique jewelry.

How do you wrap wire around wire?

How to start a wire sculpture? The way to do this is by what I have called a low-density cage. add lots of wire at the start, it will make it difficult to pass wire through the figure later, so you must start off by building a sort of cage/framework in the shape of the figure to add higher volume to later.

What are the 4 basic techniques of sculpture? Four of the main methods of sculpture include carving, assembling, modeling, and casting.

What is wire art called? Wire sculpture is the creation of sculpture or jewelry (sometimes called wire wrap jewelry) out of wire. The use of metal wire in jewelry dates back to the 2nd Dynasty in Egypt and to the Bronze and Iron Ages in Europe.

What is the history of wire wrapping? Historians agree that it's been a feature of human civilisation since the Mesopotamian Ur Dynasty around 4,300 years ago and certainly since the Ancient Egyptian times, where there was evidence of wire wrapped pieces found in tombs of the Ancient Pharaohs.

How do you wrap wires?

What is the wrap around wires called? Spiral cable wrap is known by different names: spiral wrap tubing, cable spiral wrap, spiral wrap for wires and wire spiral wrap. It's a versatile and practical cable management solution, used to bundle cables and keep them organized and protected against abrasions.

What is biotechnology and genetic engineering? Modern biotechnology today includes the tools of genetic engineering. Genetic engineering is the name for the methods that scientists use to introduce new traits or characteristics to an organism. This process results in genetically modified organisms, or GMO.

What are the benefits of genetic engineering biotechnology? Benefits of genetic engineering Improve crop yields or crop quality, which is important in developing countries. This may help reduce hunger around the world. Introduce herbicide resistance, which results in less herbicides being used, as weeds are quickly and selectively killed.

What is the introduction of genetic engineering? Genetic engineering (also called genetic modification) is a process that uses laboratory-based technologies to alter

the DNA makeup of an organism. This may involve changing a single base pair (A-T or C-G), deleting a region of DNA or adding a new segment of DNA.

What does biotechnology and genetic engineering leads to the production of?

The techniques employed in genetic engineering have led to the production of medically important products, including human insulin, human growth hormone, and hepatitis B vaccine, as well as to the development of genetically modified organisms such as disease-resistant plants.

Is biotechnology a good career? BSc Biotechnology career scope is high in India as well as abroad. With Biotechnology being an essential part of the research and development of new drugs and treatments, India ranks amongst the top 12 countries of the most preferred biotech destinations in the world.

Is genetic engineering a good career? Yes, Genetic Engineering is a good career option. Individuals with a strong interest in biology, genetics, and biotechnology may find Genetic Engineering to be a viable and satisfying professional path.

What are 5 cons of genetic engineering?

Why is it important to study genetic engineering? Genetic engineering has many medical benefits in repairing the genetic defects associated with hereditary diseases. Gene therapy refers to altering the genome to treat disease. Genetic modification is also used to develop pharmaceuticals, improve food production, and fight disease.

Is genetic engineering good or bad? While the upsides of genetic technologies are promising, we also need to consider their downside risks. Access to gene therapies to combat diseases, for example, may be limited to those who can afford them, potentially increasing inequality in health outcomes within and across countries.

What are the risks of genetic engineering in humans? Genetic therapies hold promise to treat many diseases, but they are still new approaches to treatment and may have risks. Potential risks could include certain types of cancer, allergic reactions, or damage to organs or tissues if an injection is involved.

What are the 7 steps of genetic engineering?

What is the main idea of genetic engineering? Genetic engineering aims to modify the genes to enhance the capabilities of the organism beyond what is normal. Ethical controversy surrounds possible use of the both of these technologies in plants, nonhuman animals, and humans.

What are the benefits of biotechnology genetic engineering?

What is the basic concept of biotechnology and genetic engineering? Genetic engineering, also called genetic modification, is the direct manipulation of an organism's genome using biotechnology. It is a set of technologies used to change the genetic makeup of cells, including the transfer of genes within and across species boundaries to produce improved or novel organisms.

What are examples of biotechnology and genetic engineering? Agricultural biotechnology has been used to protect crops from devastating diseases. The papaya ringspot virus threatened to derail the Hawaiian papaya industry until papayas resistant to the disease were developed through genetic engineering. This saved the U.S. papaya industry.

What is the simple definition of biotechnology? Biotechnology is the use of biology to develop new products, methods and organisms intended to improve human health and society. Biotechnology, often referred to as biotech, has existed since the beginning of civilization with the domestication of plants, animals and the discovery of fermentation.

What does genetic engineering do? Genetic engineering is used by scientists to enhance or modify the characteristics of an individual organism. For example, genetic engineering can be used to produce plants that have a higher nutritional value or can tolerate exposure to herbicides. It can be applied to any organism, although laws and regulations vary.

What are examples of biotechnology? The development of insulin, the growth hormone, molecular identity and diagnostics, gene therapies and vaccines such as hepatitis B are some of the milestones of biotechnology and its alliance with genetic engineering.

What is biotechnology and engineering? What is biotechnology engineering, can be described as the fusion of both biology and technology for the research and development of new products. It is an engineering discipline—the field of chemical engineering and applied biology—that includes engineering living organisms.

[nations and nationalism ernest gellner](#), [wire wrapping patterns](#), [introduction to biotechnology and genetic engineering](#)

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