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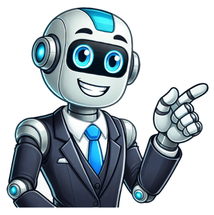

I n f a

The English alphabet has 26 letters, which are used to represent speech sounds. 5 letters of the alphabet (A,E,I,O,U) are vowels and 21 other letters are consonants (B, C, D, F, G, H, J, K, L, M, N, P, Q, R, S, T, V, X, Z, W, Y). These letters are Latin based. English alphabet is the initial lesson that everybody start learning, so it is essential to study the English letters. ● What are the English alphabet letters? Upper case letters (Capital letters) are: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Lower case letters (Small letters) are: a b c d e f g h i j k l m n o p q r s t u v w x y z In English a group of letters can give a separate sound such as: ph, sh and th. This is called digraph. Examples: photo, they, she Spelling of a word in English can be tricky to pronounce, so we have phonetic alphabet and phonetic chart that help us pronounce the letters correctly in a word. Click here to learn phonetic alphabet or here to learn phonetic alphabet on YouTube ● English alphabet and pronunciations The browser you are using does not support HTML5 audio playback. Sorry. ● Some abbreviations in English LOL – Laughing Out Loud B4N – Bye For Now A.S.A.P – As Soon As Possible P.M. – Post Meridiem A.M. – Post Meridiem P.S. – Post Script ATM – Automated Teller Machine BC – Before Christ or Because ESL- English as as Second Language FAQ – Frequently-Asked Questions RIP – Rest In Peace IBAN – International Bank Account Number ID – Identification ISBN – International Standard Book Number ● Games to play ● Flashcards exercise about English letters This exercise tests your alphabet knowledge. In order to play the game click on the cards and then say the letter in English. When you reload the page the cards and content of it change. ● Jigsaw puzzle game for the alphabet 3×3 Puzzle 4×4 Puzzle 5×5 Puzzle 6×6 Puzzle WELL DONE! 3×3 Puzzle 4×4 Puzzle 5×5 Puzzle 6×6 Puzzle This is a funny activity about English letters. Try to guess the expressions below and then click on them to see the answers. ❯❯ How R U? How are you? ❯❯ I love U I love you ❯❯ Y R U 2 L8? Why are you too late? ❯❯ The CD is 4 U. The CD is for you. ❯❯ C U later. See you later ❯❯ B4 Before ● Download the alphabet worksheet At this point it is a good idea to learn the phonetic alphabet. The phonetic alphabet is the list of symbols or codes that shows what a speech sound or letter sounds like in English. Here you can listen to the alphabet song (UK version) or the alphabet song (US version) External resource links: You can also click here to watch a video about English alphabet or here to see more information about English alphabet on WikiPedia. If you want a pdf document from VOA learning English, click here. You should know how to say phonetic alphabet. So you can learn it with sounds here interactively. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Methodology, Equations, and Examples: Engineering economics is a specialized field of economics that strategically applies economic principles to the decision-making process within engineering projects. It encompasses a comprehensive analysis of the costs and benefits of different alternatives, with the ultimate aim of evaluating their financial viability. The primary objective is to identify the most economically efficient solution that maximizes benefits while minimizing costs. One of the key pillars of engineering economics is recognizing and considering the time value of money. This concept acknowledges that the worth of money fluctuates over time due to factors such as inflation and the potential for interest or investment returns. Consequently, a dollar received or spent in the future holds a different value than one received or spent today. Engineering economists employ various tools and formulas to precisely assess the financial impact of time, including the future value formula, present value formula, compounding periods, present value (PV), future value (FV), present value calculator, and future value calculator. The terms used in this calculator are defined as follows: A - Annual Worth or Equivalent Annual Cost F - Future Value G - Gradient (or Gradient Series) i - Interest Rate (or Discount Rate) n - Number of Time Periods P - Present Value Here are the formulas used in the Engineering Economics Calculator, along with examples for each: Compound Amount (F/P, i, n): The compound amount formula (F/P) calculates the future value of a present sum of money after compounding at a given interest rate for a specific number of periods. To find F, given P: (F/P, i, n) F = P(1+i)^n Example: If you invest $5,000 in a savings account with an annual interest rate of 5%, how much will you have after 10 years? F/P = $5,000 x (1 + 0.05)^10 = $8,144.47 Present Worth (P/F, i, n): The present worth formula (P/F) computes the current value of a future sum of money that will be received or paid at a future date, discounted back to the present at a given interest rate. To find P, given F: (P/F, i, n) P = F(1+i)^(-n) Example: If you expect to receive $10,000 3 years from now, and the discount rate is 4%, what is the present value of that amount? P/F = $10,000 x (1 + 0.04)^-3 = $8,889.96 The future value formula is employed to determine the projected value of an investment or cash flow at a specific time in the future, accounting for compounding periods. This formula considers the initial investment or present value (PV), the interest rate, and the number of compounding periods to calculate the future value (FV) of the investment. By utilizing the future value formula, engineers can estimate the potential growth of an investment over time. Conversely, the present value formula calculates the current worth of an expected future cash flow or investment. It considers the future value (FV), the interest rate, and the number of compounding periods to compute the present value (PV). This formula is crucial in determining the current value of future benefits or costs associated with engineering projects. Engineering economics combines economic principles with engineering project decision-making. It involves assessing costs and benefits, considering the time value of money, and utilizing formulas such as the future value formula and present value formula. Furthermore, using compounding periods, present value calculators, and future value calculators enables engineers to evaluate the financial viability of alternatives and determine the optimal solution for their projects. Series Compound Amount (F/A, i, n): The series compound amount (F/A) formula determines the future value of equal cash flows invested or received at regular intervals over a specific period at a given interest rate. To find F, given A: (F/A, i, n) F = A [((1+i)^n - 1) / i] Example: If you invest $500 at the end of each year for the next 8 years with an interest rate of 8%, how much will you have at the end of 8 years? F/A = $500 x [((1 + 0.08)^8 - 1) / 0.08] = $5,318.31 Series Present Worth (P/A, i, n): The series present worth formula (P/A) calculates the equivalent present value of equal cash flows received or paid at regular intervals over a specific period at a given interest rate. To find P, given A: (P/A, i, n) P = A [((1+i)^n - 1) / (i (1+i)^n)] Example: You will receive $1,000 at the end of each year for the next 5 years, and the interest rate is 7%. What is the present value of this cash flow series? P/A = $1,000 x [((1 + 0.07)^5-1) / (0.07 (1 + 0.07)^5)] = $4,100.20 Sinking Fund (A/F,i,n): The sinking fund factor (A/F) calculates the regular payments (or deposits) needed to accumulate a specified amount of money in a fund at a future time, with a given interest rate. It is commonly used to plan for the replacement or upgrade of an asset. To find A, given F: (A/F, i, n) A = F x i / [(1+i)^n - 1] Example: You want to accumulate $10,000 in a sinking fund over 5 years with an annual interest rate of 6%. Using the sinking fund formula, you can calculate the regular payments required: A/F = $10,000 x 0.06 / [(1 + 0.06)^5 - 1] = $1,773.96 Capital Recovery (A/P,i,n): The capital recovery factor (A/P) calculates the equal periodic payments required to recover the initial investment and cover the interest costs over a specific period. To find A, given P: (A/P, i, n) A = P [i (1+i)^n / ((1+i)^n - 1)] Example: You need to recover an initial investment of $50,000 over 10 years with an annual interest rate of 8%. Using the capital recovery formula, you can calculate the equal periodic payments required: A/P = $50,000 x [0.08 (1+0.08)^10 / ((1+0.08)^10 - 1)] = $7,451.47 Compound Gradient (F/G): The compound gradient factor (F/G) calculates the future value of a series of increasing or decreasing cash flows that compound at a given interest rate. To Find F, given G: (F/G, i, n) F = G x [(1+i)^n - 1 - ni] / i^2 Example: Suppose you have a series of cash flows that increase by $2,000 every year for 8 years, and the interest rate is 5%. Using the compound gradient formula, you can calculate the future value of the cash flows: F/G = $2,000 x [(1 + 0.05)^8 - 1 - 8 x 0.05] / 0.05^2 = $61,964.36 Discount Gradient (P/G): The discount gradient factor (P/G) is used in engineering economics to calculate the present worth of a series of cash flows that change over time. It considers both the time value of money and the gradient, which represents the rate of change of the cash flows. To find P, given G: (P/G, i, n) P = G x [((1+i)^n - in - 1) / ((i^2) (1+i)^n)] Example: Suppose you have a series of cash flows that increase by $2,000 every year for 8 years, and the interest rate is 5%. Using the compound gradient formula, you can calculate the present value of the cash flows: P/G = $2,000 x [(1+.05)^8 - 0.05 x 8 -1) / ((0.05^2 x (1+0.05)^8)] = $41,939.91 Arithmetic Gradient Uniform Series (A/G): The Discount Gradient (A/G) formula in engineering economics is used to calculate the present worth or future worth of a series of equal annual cash flows that change by a constant percentage or gradient over time. To find A, given G: (A/G, i, n) A = G x [((1+i)^n - in -1) / (i (1+i)^n - i)] Example: Suppose you are considering a project that will generate an increasing annual cash flow with a constant gradient of $2,000 per year for a duration of 8 years. The interest rate for the project is 5% per year. A = $2,000 x [((1+ 0.05)^8 - 0.05 x 8 - 1) / (0.05 x (1 + 0.05)^9 - 0.05)] = $6,489.02 With the English alphabet you lay the most important foundation for learning the English language. The following explanations and exercises will help you learn both the spelling and pronunciation of the 26 different letters. As the content on this page is very extensive, we recommend that you complete this learning unit in several steps. Downloading our free learning materials will also help you to practice the English alphabet anytime and anywhere. Good luck and have fun! Before you really get started and get familiar with the English alphabet, we have some helpful information for you: The pronunciation of individual letters and letters within words In this unit, we will show you how to pronounce each letter of the alphabet, as you would do for example when spelling something out. Note that the pronunciation of letters changes when they are pronounced as part of a word. A good example of this is the letter y, which, when pronounced as an individual letter, sounds like like /waɪ/. However, when "y" is a part of a word it will often be pronounced like /iː/ (usually when it comes at the end of a word, such as in family). Differences between British and American English When pronouncing the English alphabet, it is important to differentiate between British English and American English: For example, the letter "z" is pronounced differently in British English than in American English. An Englishman, Scotsman or Welshman would say /zɛd/ (zed), while an American would pronounce this letter as /ziː/ (zee). Another important difference is the pronunciation of the letter "r". This is pronounced as /ɑː/ (aa) in British English and as /ar/ (arr) in American English. In this lesson we will teach you the American pronunciation of the individual letters! The letters in Phonetic Transcription In this lesson you will find the phonetic transcription of each letter (for example / waɪ / is the transcription of how to pronounce "y"). Learning the phonetic transcription of the letters will help you learn the pronunciation of the alphabet faster as well as remember it better. The phonetic spelling of the individual letters uses the International Phonetic Alphabet (IPA), which enables us to represent the sounds of a language more accurately in written characters and symbols. Discover the English alphabet and listen to the pronunciation of each letter. You can also practice your pronunciation by using the recording function! Listen to the individual letters and then enter the appropriate letter in the text field next to it. Then confirm your entry. Listen to the spelled word as much as you need to and then enter the correct word in the text box next to it. Listen to the spelled word as much as you need to and then choose the correct word. Listen to the letter and select the correct phonetic transcription. Take our learning materials with you and learn anytime and anywhere. Download Female Speaker Download Male Speaker Download Listen to the Alphabet Song to help you remember the letters! Learn to speak English with our YouTube videos. Subscribe to our channel and you won't miss any new videos! Don't forget to activate notifications so that you will be told in the future when we've made new videos. Find out what other learners wanted to know! How are the letters of the English alphabet pronounced?You can learn the pronunciation of the individual letters by listening to our audio examples and recording yourself when you pronounce them. It is also worth learning and practicing the phonetic spelling of the individual letters. In addition, our alphabet song can help you memorize the pronunciation of the letters in a playful way!What are the letters of the English alphabet?The modern English alphabet uses letters from the Latin alphabet and consists of 26 letters, each with an upper and lower case variation. Unlike the German alphabet, there are no umlauts (such as "ü" or "ö") and, unlike the French alphabet, there are no accent marks. The lower case letters of the English alphabet are as follows: a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z.Why do I need to know the English alphabet?Learning the English alphabet is the first and most basic step on your learning journey. Not only do you need to know the letters themselves, but also their pronunciation if you want to master the English language. This means that before dealing with more complicated topics such as pronunciation, listening comprehension, speaking, grammar or vocabulary, you should make sure that you can recite the alphabet in your sleep.How can I remember the letters?To memorize the pronunciation of each letter of the alphabet, listen to the audio files that we've provided as often as possible. You can also practice the pronunciation of the letters by using the exercises we have designed. Learning an easy-to-remember word alongside each letter might also help you better remember the individual letters themselves. Why not try using the sample words we've provided?What is the best way for a child to learn the English alphabet? Children often learn best with the help of music, pictures, and videos. For example, they can listen to our alphabet song or even use an existing melody to invent and sing their own song. In addition, it helps to write down the individual letters and invent funny mnemonics to help their pronunciation.Why is it useful to learn phonetic transcription when I learn the English alphabet?The international phonetic alphabet allows us to reproduce the pronunciation of a letter or word in writing. Since this phonetic transcription is often used in textbooks and dictionaries, it can be very helpful to master it if you want to perfect your pronunciation.Which letters are pronounced differently in British and American English?The letters "z" and "r" are pronounced differently in British and American English. An Englishman would say /zɛd/ (zed) for "z," while an American would pronounce this letter as /ziː/ (zee). However, if the letter "z" is part of a word (such as zoo), it is pronounced the same in both dialects. The letter "r" is pronounced as /ɑː/ (aa) in British English and as /ɑr/ (arr) in American English.Which letters are the most common in English? Converts a single payment (or value) today - to a future value. F = P (1 + i)n (1) where F = future value P = single payment today i = interest rate per period n = number of periods Download and print Future Value of Present Payment chart Example - Future Value of an Initial Amount Received Today An amount of 5000 is received today. Calculate the future value of this amount after 7 years with interest rate 5 %. The interest rate can be calculated i = (5 %) / (100 %) = 0.05 The future value of the amount can be calculated F = (5000) ((1 + 0.05)7) = 7036 Future Value - Online Calculator Note that interest rate in % is used in the calculator - not in the equation. Present Worth (or Value) Converts a future payment (or value) - to present wort (or value). P = F (1 + i)-n (2) where P = present value F = single future payment i = discount rate per period n = number of periods Download and print Present Value of Future Payment chart Example - Present Value of a Future Payment An payment of 5000 is received after 7 years. Calculate the present worth (or value) of this payment with dicount rate 5 %. The discount rate can be calculated i = (5 %) / (100 %) = 0.05 The present worth of the future payment can be calculated F = (5000) ((1 + 0.05)-7) = 3553 Present Value - Online Calculator Note that discount rate in % is used in the calculator - not in the equation. Uniform Series Compound Amount - Annuity Converts a uniform amount (annuity) - to a future value. F = A ((1 + i)n - 1) / i (3) where F = future value A = uniform amount per period i = interest rate n = numbers of periods Download and print Compound Ammount of Uniform Annuity chart Example - Present Value of Uniforms Payments An uniform amount of 5000 is paid every year in 7 years. Calculate the future value of this amount with interest rate 5 %. The interest rate can be calculated i = (5 %) / (100 %) = 0.05 The future value of the annuity can be calculated F = 5000 ((1 + 0.05)7 - 1) / 0.05 = 40710 Compound Amount - Online Calculator Note that interest rate in % is used in the calculator - not in the equation. Sinking Fund Converts a specific future value to uniform amounts (annuities). A = F i / ((1 + i)n - 1) (4) where A = uniform amount per period F = future value i = interest rate n = number of periods Download and print Sinking Fund - Uniform Annuity to Future Value chart Example - Uniforms Payments required to reach a Future Value The future value of a 7 years annuity is 5000 . Calculate the required annuity to reach this value with interest rate 5 % . The interest rate can be calculated i = (5 %) / (100 %) = 0.05 The uniform payments (annuity) can be calculated A = 5000 (0.05 / ((1 + 0.05)7 - 1)) = 614 Sinking Fund - Online Calculator Note that interest rate in % is used in the calculator - not in the equation. Present Worth Converts a uniform amount (annuity) - to a present value . P = A ((1 + i)n - 1) / (i (1 + i)n) (5) where P = present value A = amount per interest period i = discount rate n = discount periods Download and print Present Value of Uniform Annuity chart Example - Present Value of Uniform Amounts The uniform amount (annuity) paid from a 7 years project is 5000. Calculate the present value with interest rate 5 %. The interest rate can be calculated i = (5 %) / (100 %) = 0.05 The present value of the uniform amounts can be calculated P = 5000 ((1 + 0.05)7 - 1) / (0.05 (1 + 0.05)7) = 28932 Present Worth or Value - Online Calculator Note that discount rate % is used in the calculator - not in the equation. Capital Recovery Converts a present value - to a uniform amount (annuity). A = P (i (1 + i)n) / ((1+i)n - 1) (6) where P = present value A = amount per interest period i = interest rate n = discount periods Download and print Capital Recovery - Uniform Annuity to Present Value Capital Recovery - Online Calculator Note that interest rate in % is used in the calculator - not in the equation. The future value of money. Compound interest tables - interests rates 0.25 - 60%. Future value of single cash flow. Interest rate is the cost of money. Internal Rate of Return (IRR) - the break-even interest rate. The value of a stream of payments is called the Net Present Worth (NPW). Working with relative values. The value of money in the future is the Present Value. Motto: One cause after another (Source) Description: (Source) INFJs are conscientious and value-driven. They seek meaning in relationships, ideas, and events, with an eye toward better understanding themselves and others. Using their intuitive skills, they develop a clear and confident vision, which they then set out to execute, aiming to better the lives of others. Like their INTJ counterparts, INFJs regard problems as opportunities to design and implement creative solutions. One of the rarest personality types, INFJs are quiet, private individuals who prefer to exercise their influence behind the scenes. Although very independent, INFJs are intensely interested in the well-being of others. INFJs prefer one-on-one relationships to large groups. Sensitive and complex, they are adept at understanding complicated issues and driven to resolve differences in a cooperative and creative manner. INFJs have a rich, vivid inner life, which they may be reluctant to share with those around them. Nevertheless, they are congenial in their interactions, and perceptive of the emotions of others. Generally well-liked by their peers, they may often be considered close friends and confidants by most other types. However, they are guarded in expressing their own feelings, especially to new people, and so tend to establish close relationships slowly. INFJs tend to be easily hurt, though they may not reveal this except to their closest companions. INFJs may “silently withdraw as a way of setting limits”, rather than expressing their wounded feelings—a behavior that may leave others confused and upset. INFJs tend to be sensitive, quiet leaders with a great depth of personality. They are intricately and deeply woven, mysterious, and highly complex, sometimes puzzling even to themselves. They have an orderly view toward the world, but are internally arranged in a complex way that only they can understand. Abstract in communicating, they live in a world of hidden meanings and possibilities. With a natural affinity for art, INFJs tend to be creative and easily inspired. Yet they may also do well in the sciences, aided by their intuition. Keirsey Temperament: NF – Idealist (What does this mean?) Friendships: Check the INFJ Friendship experience. Romantic Relationships: Check the INFJ Romantic Relationships. Family Life: Check the INFJ Family Life and INFJ as parent. Education: Check the INFJ Education Experience. Possible Careers: Artist, Chiropractor, Clergy, Counselor, Photographer, Teacher, Writer (more) For in depth analysis check the INFJ Career Path. Typing Confusions: Check the INFJ Typing Confusions. Famous INFJs: Leonard Cohen, Noam Chomsky, Mahatma Gandhi, Thomas Jefferson, Ludwig Wittgenstein (More) Taylor Swift src Marilyn Manson src Adolf Hitler src Alanis Morissette src Martin Van Buren src Jane Goodall src Prayer: “Lord, help me not be a perfectionist. (did I spell that correctly?)” Acronym: I N F J = Inner Nuances Foster Journeys Dominant Jungian function: Introverted Intuition (Ni) – The ability to sense the meaning behind events and symbols (What does this mean?) Secondary Jungian function: Extraverted Feeling (Fe) – The ability to evaluate based on what is good for others or expected by society (What does this mean?) Download Printable Flyer (pdf)