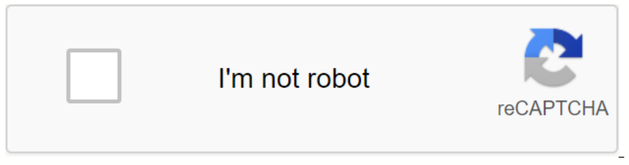

Continue

Budget set graph

Click on the question to find a solution. Question 1: Suppose there are two items. The price of the first good is $4 and the price of the second good is $10. Reception is m =200. Specify a budget constraint. Specify the inclination and intersections of the budget line. Chart budget set. Assume that the income increases to m = 300. At the same time, the price of good 1 rises to 10. Specify the equation for the new budget line. Specify the inclination and intersections of the new budget line. Chart the new budget set. Question 2: Suppose the prices of the three goods are given by p1=2, p2=4 and p3=10. The consumer has an income of $49. Suppose he/she wants to buy 2 units of good 1 and twice as many good 2 units as a good 3. How many units of each item can afford (given our standard assumption that the consumer is not limited to buying whole units)? Question 3: Suppose the store offers a discount on cereals. This means that if you buy three boxes for $2 each, you can buy additional boxes for $1. In the following assume, you can chart the quantity of cereals on the horizontal and all other items (such as composite items) on the vertical axis. The price of one unit of composite good is, of course, 1. Also for the simplicity that cereals are perfectly divisible (i.e. they do not need to be consumed in whole units). Reception is m =20. Find the vertical intersection of the budget line (that is, the consumption package on the budget line for which x1=0). Find the point on the budget line where the price changes (i.e. the consumption package on the budget line for which x1=3). Find the horizontal intersection of the budget line (that is, the consumption package on the budget line for which x2=0). Chart budget set. Specify the inclination of the budget line if x1 =<3 and= the= slope= if= x1=>=;3. Question 4: Suppose health insurance covers 80% of the cost of a particular drug up to $1,000. No additional expenditure is covered. Suppose the price of 1 unit of the drug is $100. Consumer income is $2000. As in the previous question, chart the amount of the drug on the horizontal and all other goods (as folded goods with a price of 1) on the vertical axis. Again, let's assume that the drug is perfectly divisible. Find the vertical intersection of the consumer budget line (i.e. the consumer package on the budget line for which x1=0). At what value does x1 change the effective price faced by the consumer? Find the corresponding x2 so that the consumption package (x1.x2) is on the budget line. Find the horizontal intersection of the budget line (that is, the consumption package on the budget line for which x2=0). Chart budget set. Determine the slopes of the budget line. Now let's assume that the consumer can only get a prescription for 10 units of the drug. That is, <10. Draw the new budget set (Note: This is a situation with rationing). To draw= the= new= budget= set= (note:= this= is= with= rationing).= to=></10. Draw the new budget set (Note: This is situation with rationing). To > že x1 =</3> =</3> titulná strana Otázka 1: Rozpočtové obmedzenie je dané 4x1 + 10x2 =<200. thus,= the= budget= line= is= given= by= 4x1+10x2=200. the= intercepts= are= (50,0)= and= (0,20).= the= slope= is= -p1/p2=4/10=0.4. (dark= line= in= the= graph).= the= budget= set= is= the= area= underneath= the= budget= line= (red= += yellow= area= excluding= the= yellow= triangle= on= the= top).= the= new= budget= line= is= 10x1+10x2=300. the= intercepts= are= (30,0)= and= (0,30).= the= slope= is= -p1/p2=-1 (grey= line= in= the= graph).= the= new= budget= set= is= the= yellow= area= in= the= graph.= question= 2:= the= budget= line= is= given= by= 2x1+4x2+10x3=49. since= x1=2, this= reduces= to= 4x2+10x3=45. because= the= consumer= purchases= twice= as= many= units= of= good= 2= than= of= good= 3,= the= equation= x2=2x3 must= hold.= thus,= substitute= 2x3= for= x2= in= the= equation= 4x2+10x3=45 to= get= x3=2.5. therefore,= x2=5. consequently,= the= consumption= bundle= is= (2,5,2.5).= question= 3:= if= consumption= of= good= 1= is= 0= then= all= money= is= available= for= consumption= of= other= goods.= thus,= the= vertical= intercept= is= (0,20).= purchasing= three= units= of= good= 1= costs= 6= dollars.= thus,= 14= dollars= are= left,= and= we= get= (3,14).= every= additional= unit= costs= 1= dollar.= if= the= remaining= 14= dollars= are= spent= on= cereal,= 14= boxes= (in= addition= to= the= 3)= can= be= purchased.= thus,= the= horizontal= intercept= is= (17,0).= the= budget= set= is= indicated= by= the= yellow= area.= the= budget= line= is= the= blue= line= in= the= graph.= the= slopes= are= -2= and= -1,= respectively.= question= 4:= similar= to= the= previous= question,= the= vertical= intercept= is= (0,2000).= if= the= insurance= covers= 80%= of= the= cost ,= then= this= means= that= per= unit,= the= insurance= company= pays= 80= dollars= and= the= consumer= pays= 20= dollars.= the= company= only= pays= up= to= 1000= dollars.= thus,= we= must= find= the= value= x1= for= which= 80x1=1000. therefore= x1=12.5. up= to= x1=12.5 the= consumer= faces= a= price= of= 20= dollars= per= unit.= purchasing= 12.5= units= therefore= costs= 250= dollars.= this= reduces= consumption= of= other= goods= (measured= in= dollars)= from= 2000= to= 1750.= therefore= we= get= (12.5,1750).= if= x1=>12,5 spotrebiteľ čelí cene 100 dolárov za jednotky. Vzhľadom k tomu, že je 1750 dolárov vľavo, 17,5 ďalších jednotiek je možné zakúpiť. To znamená, že priesečník je (30,0). Súbor rozpočtu je označený žltou oblasťou. Riadok rozpočtu je modrá čiara v grafe. Zjazdovky sú -20 a -100, resp. Graf je možné vidieť nižšie. Na titulnú stranu Množina rozpočtu alebo množina príležitostí obsahuje všetky možné balíky spotreby, ktoré si niekto môže dovoliť vzhľadom na ceny tovaru a úroveň príjmu danej osoby. Množina rozpočtu je ohraničená nad rozpočtovým riadkovom. V nastavenej notácii pre spotrebný tovar x = x 1 , x 2 , ... , x k] {\displaystyle \mathbf {x} =\left[x_{1},x_{2},\ldots ,x_{k}\right]} so súvisiacimi cenami p = [p 1 , p 2 , ... , p k] {\displaystyle \mathbf {p} =\left[p_{1},p_{2},\ldots ,p_{k}\right]} , množina rozpočtu je B = { x ∈ X : p x ≤ m } {\displaystyle B=\left\{\mathbf {x} \in X:\mathbf {p} </200.> </200.> {x} \leq m\right\}} where m {\displaystyle m} is receiving and consumption set to X {\displaystyle X} is considered a non-negative orthe in R to {\displaystyle \mathbb {R} ^{k}} . Graphically, all consumption packages that are within budget and budget constraints are a budget set or a set of opportunities. By most definitions, budget files must be compact and convex. References Mas-Colell, Andreu; Whinston, Michael D.; Green, Jerry R. (1995). Microeconomic theory. New York: Oxford University Press. p. 9 - 11. ISBN 0-19-507340-1. This article on microeconomy is a shoot. You can help Wikipedia by expanding it.vte Obtained from By the end of this section, you will be able to: Understand budget lines Explain price ratios Refresh budget lines after prices and income changes Understand how households make decisions, economists take a look at what consumers can afford. In order to do this, we need to map the budgetary constraints on consumers. In a budget constraint, the quantity of one item is measured on a horizontal axis, and the quantity of the other item is measured on the vertical axis. The budgetary constraint shows the different combinations of the two goods that the consumer can afford. Consider José's situation, as shown in Figure 6.1a. José likes to collect T-shirts and movies. In Figure 6.1a, the number of T-shirts José will buy is on the horizontal axis, while the number of films he buys José is on the vertical axis. If José had an unlimited income, or if the goods were free, then he could consume them without restriction. But José, like all of us, faces budgetary constraints. José has a total of $56 to spend. T-shirts cost $14 and movies cost $7. Plotting a budget constraint is a relatively simple process. Every point on the budget line must run out of all $56 from José's budget. The easiest way to find these points is to fence captures and attach the dots. Each capture is a case where José spends his entire budget on either T-shirts or movies. If José spends all his money on movies that cost $7, José can buy $56/$7 or 8 of them. This means that the intersection is a point (0.8). Here José buys 0 T-shirts and 8 films. If José spends all his money on T-shirts that cost $14, José can only buy 4 of them ($56/$14). This means that x-intercept is the point (4.0). Here José buys 4 T-shirts and 0 movies. By combining these two extremes, you will find every combination José can afford along his budget line. For example, at point R, José buys 2 T-shirts and 4 movies. It costs him: T-Shirts @ $14 x 2 = $28 Movies @ $7 x 4 = $28 Total = $24 + $28 = $56 This point actually depletes José's budget. Figure 6.1a Budgetary constraints We now know that José has to shop sometime along lines depending on the Preferences. Note that any point on the budget line is feasible. José may spend less than $56, but that's not optimal because he can still buy more merchandise. Since t-shirts and movies are only two goods, it is not possible in this model for José to save. This means that not going to waste its full budget is basically a wasted income. On the other hand, no point exceeding the budget line is feasible. If José only has $56, he can't spend more. Note that areas in the green zone are not necessarily more optimal than points along the budget line. The optimal point depends on José's preferences, which we will examine when discussing José's indifference curve. Figure 6.1b Slope Although we can easily only connect X and Y captures to find a budget line representing all possible combinations that make up for José's entire budget, it is important to discuss what slope this line represents. Remember that inclination is the speed of change. In economics, the slope of the chart is often very important. In this situation, the slope is QY/QX. If we want to represent the slope in terms of prices, it is equal to Px / PY. This may seem counterintuitive at first, as we are used to seeing a slope like Y/X., but the reason it doesn't apply to prices is because the y-axis represents quantity, not price. As we have seen above, as the price is doubling, the amount that the consumer could have bought before will be halved. If José makes $56: If the price of movies is $7, he can buy 8 of them When the price of movies is $14, he can buy 4 of them Because the price and quantity have this inverse relationship, we can use either Px/PY or QY/QX to find a slope. Since price information is often given, it is important to remember that inclination can be calculated in both directions. What does slope mean? The importance of the slope or price ratio of the budget line is the same as that of the PPF. (The difference between the two curves is that the PPF shows all the different combinations of a given time and time and production constraints, while the budget line shows different combinations of a given budget limit. Otherwise, the two charts are essentially the same). This means that the slope of the curve is the relative price of good on the x-axis in terms of good on the y-axis. The price ratio of 2 means that José has to give up 2 films for each t-shirt. Similarly, the inverse inclination of 1/2 means that José has to give up a 1/2 t-shirt for the film. When revenue changes Because budget and prices are prone to change, José's budget line can shift and turn around. For example, if José's budget drops from $56 to $42, the budget line will move inward because he is unable to buy the same number of goods as before. To plot a new budget line, find new captures: Budget: $42 Movie price: $7 Price of T-shirts: $14 Maximum number of movies (y-intercept): $42/$7 = 6 Maximum T-shirts (x-intercept): $42/$14 = 3 Figure 6.1c As a result of the change, José's budget line has shifted inwards, so there are fewer opportunities for consumption. When the price changes In addition to changes in income, sometimes the price of films and T-shirts rises and decreases. Suppose from our original budget of $56, movies double the price from $7 to $14. Again, to plot a new chart, simply find new captures: Budget: $56 Movie Price: $14 Price of T-shirts: $14 Maximum number of movies (y-intercept): $56/$14 = 4 Maximum number of T-shirts (x-intercept): $56/$14 =4 Figure 6.1d As a result of the pivot, José has fewer consumption options available and line inclination changes. This has two effects: The Size Effect: There are fewer opportunities for consumption (as a result of the price change, the purchasing power of the dollar has fallen). Slope Effect: The relative price of movies is now higher, while the relative price of t-shirts is now lower. When changing price and revenue The last type of change is a change in both price and revenue. Suppose the price of movies increases from $7 to $12 and José's budget increases to $63. To render a new budget line, follow the same steps as before: Budget: $63 Movie price: $12 T-shirts price: $14 Maximum number of movies (y-intercept): $63/$12 = 5.25 Maximum number of T-shirts (x-intercept): $63/$14 = 4.50 Figure 6.1e These changes have interesting effects. José now has access to some new consumption opportunities, but many more are now unavailable. While the slope effect has clearly made the relative price of t-shirts lower, the size effect is uncertain. These effects are implicit in the income and substitution effects that we will soon examine. Conclusion While we understand the different ways in which consumers can run out of revenue, we have not yet discussed how to determine which bundles of goods different consumers prefer. To complete our analysis, let's look at the indifference of the curve. Budget constraints on all possible combinations of goods and services that can be achieved in view of current prices and limited income Budget line graphical representation of consumer budget constraints The price ratio of the budget line slope represents price x in terms of good y Size Impact of price change on consumer purchasing power Slope Effect effect of price change on relative prices of goods x and y y