Negative sine graph

How to tell if a sine graph is negative. Negative cosine graph vs sine. How to graph a negative sine function. Negative period sine graph. Can the amplitude of a sine graph be negative. What does a negative sine graph look like. Negative amplitude sine graph. Graphing negative sine and cosine functions.

Examine the graph Y = a sin (BX + C) allows some very interesting discoveries. They realize that changing A, B and C will change the parameters of the SINE.NN chart first look how to look at the graph of Y = a sin (BX + C). We can start establishing a equal to 1. However, if we set b and c equal to zero, we simply would have the graph of the axis from sin (0) = 0.Â ¢ For this reason we will start with all the parameters equal to 1. We can see that this is the sinus curve moved to the left a unit. But what happens if we increase to a much bigger number? Now let's see that the maximum and minimal values of the chart are now 20 and -20. This leads to the idea that a parameter for the breadth of the Sine chart.ã, Verre that if this is true for the negative values of A. The graph of Y = -1 sin (1x + 1) in which it is now a negative value shows that a negative value for A or the size of the Sine chart changes all the positive values to the negative values and all negative values at values Positive, making the chart seems to reflect through the X axis., Try another negative value to see if our idea holds true. We found the same results. Then the parameter of an agreement with the amplitude of the graph. The absolute value of A will be the highest graph and the negative absolute value of A will be the minimum of the graph. Furthermore, a negative value to reflect the graph through the X axis. Next, we will examine how different values for B will influence our chart. It is for the first time an underlying animation B that changes from -5 to 5, we can see the parameter B seems to deal with how much time it takes the chart to start repeating itself or the period of the sinusoidal curve. The animation of the graph looks like a spring that is crushed together while B approaches 30 and a spring that has been stretched while B approaches 0. The mathematical reason is because the periodicity of the Sine function is 2Ã¯ Â , ¬, and the periodicity of the sine curve is. Therefore, as B is the larger the period of the smaller senus curve. This translates into more curves and spring to look like it is crushed and. Similarly, since B becomes smaller, the sinusia curve period enlarges. This translates into less curves and the spring to seem that is stretched. "= 1 sin (NX +1) we can now look at negative values for B." comparing the graphs of y = 1 sin (1x + 1) EY = 1 sin (-1x + 1), we can see that the graphics are the They except for the negative graph seems to be moved to the left and both graphics repeat every 2 2 units â,¬ or about 6.28 units. This is also the fact that the periodicity of sinusoidal function is 2Ã¯ â,¬, and the periodicity of the sine curve is .Ã¨, for our case b is 1 and -1 so the period of the curve as it would be 2Ã¯ â,¬ and -2Ã¯ â,¬. However it is the negative graph b is really moved? Ã, a closer inspection and seems that the negative graph is a reflection through the yail. If we compare the graphs of Y = 1Sin (2x + 1) EY = 1SIN (-2x + 1), we can then check that a negative value for B reflects the graph through the Y axis. Ã, even if we take another look AY = 1SIN (-2x + 1) We can see that when B = -2 the chart repeats every 2Ã¯ Unit â,¬ or once every Ã¯ â,¬ â,¬.- first when we looked y = 1sin (1x + 1) The chart repeated once every 2 2 units â,¬. So there is the number of times the graph repeated within 21 units â,¬? Verify that another value of B checks to see if our idea holds. Let's take a look at Y = 1Sin (10x + 1) .ã, for B = 10, once again the chart is repeated 10 times with the units 2Ã¯ â,¬, or repeats once every .628 Unit. Therefore, the repetition of the chart is determined by parameter B. The chart repeats B times in the units 2Ã¯ â,¬ or will repeat once in 2Ã¯ â,¬ / b. Finally, we can As the C parameter affects the graph of Y = Asin (BX + C). An animation of the graph with C changes between 0 and e It looks like a wave that never changes the form still moves to the right when C becomes smaller and moves to the right as C becomes big. It seems that the value of C moves the graph horizontally along the X axis. Sin (1x + N) Watch some different graphs to see if we can make a conclusion. Looking y = 1 sin (1x + 1), y = 1 sin (1x + 4), and y = 1 sin (1x-4), we see that there really moves the chart. However, when there is equal to -4 the graph moves to the right 4 units and when there is equal to 4 the graph moves to left 4 units. Now we can see that a positive value for C will cause a displacement of the c to left units, while a negative value for C will cause a displacement of units C to the right. In conclusion, parameters A, B and C have all influenced the graph of Y = Asin (BX + C) if different ways. The parameter will change the height or amplitude of the graph. B will change how often the wave model of the chart is repeated. Finally, C move the graph horizontally along the X axis. For further exploration, we could look like a fourth parameter can affect the graph, like Y = a sin (BX + C) + D.Ã ¢ In this case, D He would make a vertical translation of the sine curve. Using the graphics computer 3.2, we can explore the curve of the continuous sinuses expressed by the equation by examining various graphs of: for different values of A, B and C, we can see the specific impact that these values have on our original curve . Several values to explore the sinusoidal curve in terms of coefficient A, we must examine a when B = 1 and C = 0 in our original equation. First we look at positive values of A. What happens to the corresponding graphs as a change value? . The original sinus curve is represented by the gray line. Regardless of which value is chosen for our coefficient A, the intersections of this chart along the X axis will remain x = 0, x = pi and x = 2pi. By choosing different positive values of the coefficient A, we can see our original sinusoidal curve has only changed in amplitude or height. Now, what can we expect for the negative values of A? Let's examine the following graphs: once again, the breadth of the original breast curve has changed, as we would expect. The intersections of this chart and X axis are still in x = 0, x = pi and x = 2pi. The difference with a negative value of A, however, is our sinusoidal curve now has a negative width. In other words, our graphics are the same as when one was a positive value, but now they are reflected through the X axis. To see a direct comparison between positive and negative values of A, click here. Watch the animation of our sinusoidal curve as it goes from -5 to 5. Note as different values of a change in the width of our sinusoidal curve. Look how the curve seems to grow in height in the Y direction. Different values of B for this exploration, we must take to = 1 and C = 0 to examine the coefficient B will be on our original sinusoidal curve. Let's start by exploring the positive values of b. What happens to the corresponding graphs like the value of changes B? The original sinus curve is represented by the gray line. This time, different values of our coefficient involve different points of intersection in the X axis. The curves do not intersect the X axis on X = 0, X = PI and X = 2PI. By choosing several positive values of the coefficient B, we can see our original sinusoidal curve has changed only in the period or length of a cycle. In other words, the period for the sinusoidal curve to make a full oxic is no more than 0 to 2pi. What happens when B has a negative value? Let's examine the following graphs: once again, the original breast curve period has changed here, as we would expect. The difference with a negative value of B, Our sine curves have the same period as the positive values of B above, but now they are reflected through the X axis. For a direct comparison between positive and negative values of B, click here. Watch the animation of our sinusoidal curve like B B -5 to 5. Note how different values of B changes the period of our sinusoidal curve. See how the curve appears to be contracted and expand along the X axis. Different values of C in this case, we are assuming a = 1 and b = 1 to demonstrate the influence the coefficient that will be on our sinusoidal curve. First of all, we look at the graphs generated for positive values of c. What happens to the corresponding graphs like the value of changes C? The original breast curve is again represented by the gray line. This time, different values of our coefficient involve different positions of our chart along the X axis. The curves do not intersect the X axis on x = 0, x = pi and x = 2pi, but the fact has the same period. By choosing different positive values of the C coefficient, we can see our original breast curve has changed only in the phase. In other words, the period for the sinusoidal curve to make a full pointer is still an inverosal length from 0 to 2pi as the original curve, but now all the graphs were all moved to the left. What happens when C has a negative value? Let's examine the following graphs: once again, the original breast curve phase has changed here, as we would expect. The difference with a negative value of C, however, is that our sine curves were moved to the right this time. Everyone still has the same period as the positive values of C above, but now they moved to the other direction along the X axis. For a direct comparison between positive and negative values of C, click here. Watch the animation of our sinusoidal curve as C VA DA -5 to 5. Note How much different C values change the phase of our sinusoidal curve. See how our curve appears to move back and forth along the x-axis.return to class page page, â "¢ used the circle of the unit to define the trigonometric functions for acute angles so far. We need more than the sharp corners in the next section where we will watch the oblique triangles. Some oblique triangles are obtuse and we need to know the breast and the cosine of the optusi corners. Take it, we are doing it, we should also define the trig functions for angles over 180 Â ° and for negative angles. First we need to be clear about what are such angles. The ancient Greek surveyors considered only angles between 0 Â Â ° and 180 Â °, and considered the rectilinear corner of 180 Â ° né the degenerated angle of 0 Â ° to be angles. It is not only useful to consider those special cases from corners, but also to include angles between 180 and 360 â €