Economics

Cost Tables

Notes on Calculating Marginal Cost (MC)

Formula for calculating marginal cost (MC)

- $MC = \Delta TC / \Delta Q$. TC is total cost, Q is quantity, and the delta symbol Δ means change.

- To plug numbers into MC, we need to write MC a slightly different way.

- $MC = TC_2 - TC_1 / Q_2 - Q_1$. This the form that MC needs to be in to put numbers in it.

- Follow the same approach for ($MC = \Delta TVC \div \Delta Q$) that appears in the 8th column in the second Cost Table in your readings.

- Here is a sample problem for the MC to produce two units of output in the first Cost Table (8th column) Let's look at the first two quantities 1 and 2. Use columns 4 and 1 for your numbers.

    $$MC = 41 - 35 / 2 - 1$$

    $$MC = 6 / 1$$

    $$MC = 6$$

- Just follow the instructions at the top of each column. They will tell you how to calculate the answer. Thus, from the first Cost Table, the MC to produce two units of output is 6. That is the answer that we have above and is the same answer that appears in the second row of column 8. The calculation above is how the answer was derived.

Brief Quiz. Briefly answer all questions. Show all work if required.

Brief answers.

1. For both of the cost tables in your readings (SR Cost 2 and Cost Tab 1), take a look at the

   column 8 (marginal cost MC column). In your tables for the 8th column, there are two

   different formulas for calculating MC. Why will both of those calculations give the

   same answer?

Both of these calculation will give you the same answer because the answer after subtraction
are the same(same difference) the only difference is the way in which it was written or the
numbers used. The formula MC = Δ TC / Δ Q, is the same as (MC = Δ TVC ÷ Δ Q) because
the changes in cost and quantity are the same

2. Re-do the MC sample calculation, from the first Cost Table above, using the

   MC = Δ TVC ÷ Δ Q formula. Show all work. Are your answers the same?

   Now take another look at the question in 1. What do you think?

MC = Δ TVC / Δ Q.

MC =16-10/2-1

MC= 6/1

MC=6

My answers are the same. I expected this because the changes in total cost and total variable
cost are the same.