



## A2 Delivering the lecture

### A2.1 Connections

#### Linking

This takes us back to the point I made earlier.

There is a direct link between this and what we looked at last week.

This ties in with the project you are doing at the moment.

This relates directly to your lab work.

#### Changing direction

After this preliminary step, we can go back to the main result.

Now we are going to turn our attention to Exercise 2.

So, that's the application of Formula 7. Now, let's look at the next one.

That completes my overview of the case. Now I'd like to move on to the proof of Theorem 5.

### A2.2 Reasoning

Because of this,  $t = 5$ , as long as the model remains stable.

As a result, we conclude that the property holds.

Since  $a = 1$ , this proves that  $b = 2$ , which simplifies the previous equation.

This proves that the model is at fault, so it needs to be restructured.

Therefore, Property A is true.

Let's apply the formula here. As a consequence, we get the result [...]

The result is contradictory, so the hypothesis is false.

This contradicts our assumption about the model.

It is clear that Property A implies that the model works.

It is easy to check the calculations. I'll leave it to you.

Since  $A = 0$ , it follows that the property has not been verified.

It suffices to say that the energy is always conserved.

We'll study the new design in order to see how it works.

Properties 1 and 2 are deduced directly from the previous result.

Let  $v$  be the velocity. If we assume  $v$  is constant, then this result is true.

### A2.3 Conditions

If this is true, then the model works.

If this were true, then the model would work.

If this had been true, then the model would have worked.

This would be true if we could cancel the initial force, but that's not possible.

We can assume that production grows, unless  $p = 1$ .

This holds true only if the reaction is carried out in suitable conditions.

The function is positive even if the  $m$  parameter decreases.

What if we change the initial conditions of the experiment?

These conditions are achieved either at the outset, or after a few minutes.

Equality holds if and only if  $a = b = 2$ .

Under the previous conditions, the process will work.

### A2.4 Comparisons

Like Theorem 5, Theorem 2 is also a fundamental result.

Unlike the formula we looked at earlier, in this case we can interchange  $f$  and  $g$ .

We now have a result similar to that in Theorem 6.

This theory is less important than the one we are going to study today.

If  $a$  is greater than  $b$ , then  $c$  is less than  $a$ .

The more you work on your own, the easier it will be to understand the material.

This a good example, but I think the one I have on this handout is better.

The best case in point is the one I mentioned earlier today.

You can apply that argument. Likewise, the other arguments work here too.

A deeper discussion of this result may lead to new perspectives.

The radius of  $A$  is twice that of  $B$ .

The diameter of  $A$  is the same as that of  $B$ .

$A$  is four times greater than  $B$ , whereas  $C$  is three times smaller than  $A$ .

## A2.5 Options

On the one hand, we have theory A. On the other hand, we have theory B.

There are lots of pros and cons.

Let's consider some alternatives to this theory.

We've looked at three options. Nonetheless, the first one is the least expensive.

One way of solving this problem is by using today's formula. Another way would be to apply the following formula:

Although there are two alternatives, we are going to work with just one.

There are different ways of looking at this theory.

The first option is clear. But, what about the second option?

So, now let's look at the third option.

Let's take a look at the strengths and weaknesses.

Despite this result, the proof is still incomplete.

There are, however, disadvantages.

What about the advantages?

In spite of this difficulty, the problem is actually quite straightforward.

We haven't reached the right conclusion yet.

While this appears to be true, it is not.

However, there are some problems too.

I'd like to point out the positive points of this project.

## A2.6 Examples

For instance,  $a$  does not always equal  $b$ .

Let's look at the case of Borel sets.

The Gauss theory is a case in point.

For example, take a look at Taylor's Formula.

To understand this better, let's consider an example given to us by the University of Berkeley.

By studying this model, we can confirm our conjecture.

Now, we are going to analyse some examples.

This example illustrates how the design works.

Actually, this is an excellent example of how to prove the theory.  
As a matter of fact, you can find good examples in Chapter 5.  
You need to find examples of your own.

## **A2.7 Expanding**

### **Adding information**

Likewise, Theorem 1 could be applied in this case here.  
Not only does Theorem 5 work here, but so does Theorem 6.  
Furthermore, we will test this theory ourselves.  
There is yet another explanation in Chapter 5.  
Indeed, this theory was first introduced in 1968.  
You can look up references to this on your reading list in order to get more details.  
In fact, we will be studying this in greater depth next week.

### **Rephrasing**

In other words, this assumption isn't always true.  
Let me put it to you another way.  
Right. I'll rephrase what I just said.  
Perhaps I should explain it in a more simple way.

### **Digressing**

By the way, there is an article on this subject in today's newspaper.  
I'd like to digress for just a moment.  
Some of you might be interested to know that there is an exhibition on Art and New Technology on in Barcelona next week.  
There is no need to write this down, but did you know that this formula was validated by a professor from this university?  
This may not seem relevant, but there is a talk being held here tomorrow on semi-conductors.  
Incidentally, there will be no class on 12 May.

*Adapted from: <http://www.upc.edu/slt/classtalk/>*