# CO 330, LECTURE 21 SUMMARY 

FALL 2017

## Summary

Nick discussed the triple product identity today.
First he showed Euler's pentagonal number theorem follows from the triple product identity by substituting $x=q^{3 / 2}$ and $y=-q^{1 / 2}$. (I was going to assign that on assignment 6 , but now I won't.)

Then he went through the sketch of the proof which is in the course notes.

## References

The triple product identity is the second topic of chapter 10 in the course notes.
We're not going to do the last part of chapter 10, but it also interesting; take a look. Chapter 10 also has some interesting notes after the exercises; also well worth a look.

