

AKTUA TIMES

2016 FIRST SEMESTER EDITION



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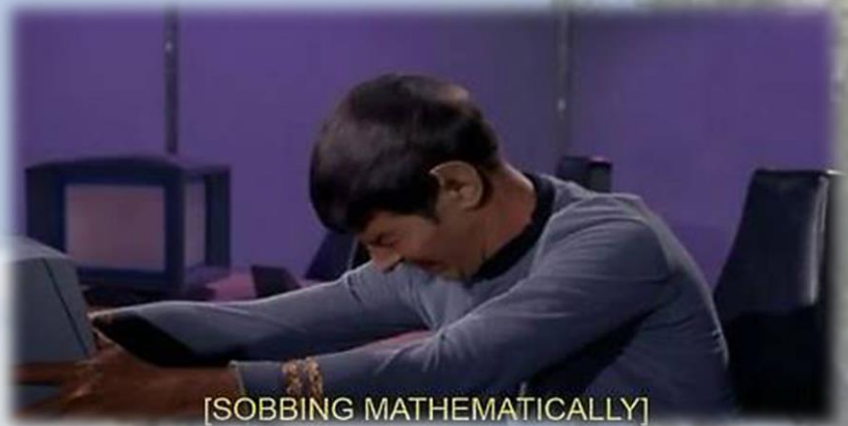


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AktuaUP

LETTER FROM THE EDITOR:



Shakespeare once said that 'the world's a stage and each must play a part'...

Apparently our part is that of stressed out, crazed students who happen to be buried under their books for the most part of the year.

On one hand I want to say that this has been one long, LONG semester, but on the other I'm really shocked that it's already June.

For Aktua it's been a great one, with the addition of 5 new committee members, multiple Career evenings, a poker night, a winter charity drive and many days of planning for upcoming events.

We really hope that next semester will be even more exciting and that student involvement will only increase. Please remember that we are here for you to bother and bug; and to do what we can to help make studying this degree a little more fun.

This semester we decided to do things a little differently and save some trees by switching to an E-Times, we hope that you enjoy the new look. On behalf of the entire Aktua committee we wish you the absolute best of luck for these upcoming exams, stay focused - that TV series will still be there when exams are over ;) - and motivated, you can do this.

Have a fantastic holiday, see you next semester!

-Catherine Halsey

AKTUA COMMITTEE 2016:



Committee members (from left to right): Alan Wrigglesworth, Triston Maraj, Ipeleng Kutumela, Catherine Halsrey, Kendyl Renzulli, Shingirai Muchenje, Tshiamo Makinta, Megan Fowlds, Hazel Makoni, Naadir Dawood and Nigel Mutero.

GET EXCITED... 2nd SEMESTER UPCOMING EVENTS:

- Soccer day!
- Movie night!
- Aktua Ball!
- Quiz night!





A note on the upcoming annual Aktua ball:

Audrey Hepburn once said that going to *a certain place* is always a good idea. I for one fully agree. This place, filled with lights, cobblestones, set in the outside air, with soft music playing in the background and street café's wherever you look, explains a lifestyle; a life lived without a care in the world.

The ball will be a perfect example of a carefree elegant evening full of lights and laughter.

It will most certainly be a night to remember!

Please ensure that you keep the date open, and be on the lookout for any announcements closer to the time.

Let us all fly away for a night without pressure and stress after a long, yet fulfilling, year.

We hope to see you on the plane heading to the ball on the 21st of October.

-Megan Fowlds

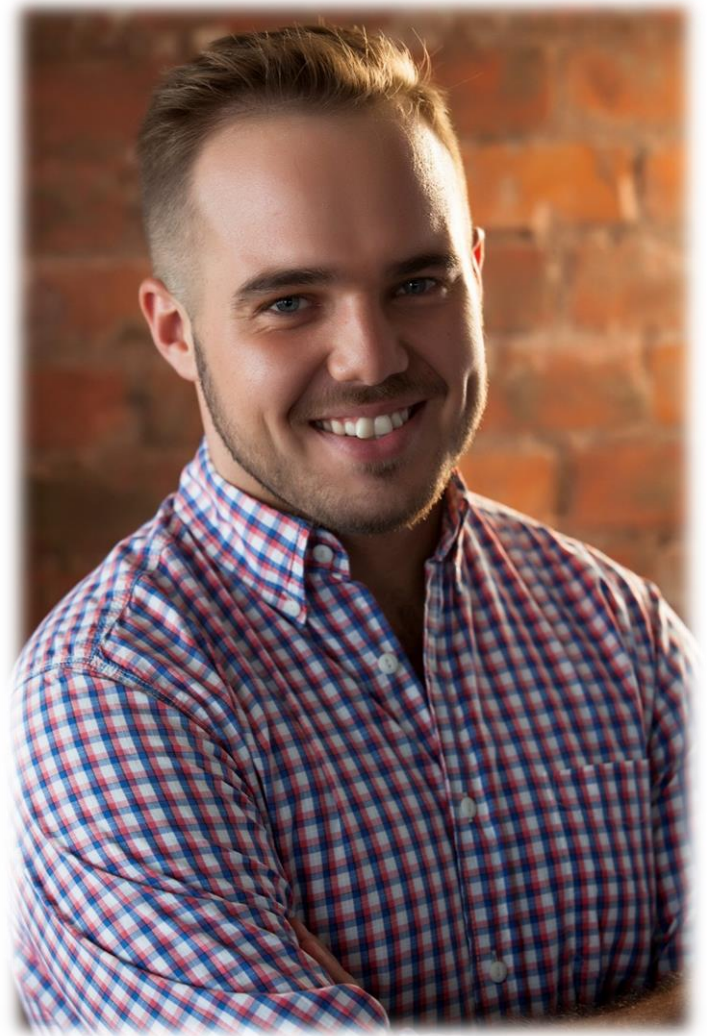
Lecturer interview: Statistics

lecturer Johan Ferreira:

1) Within the ever enticing world of statistics, what has been the most interesting or unusual project you have worked on?

As a staff member in the Department of Statistics we render statistical support to postgraduate students and researchers within the entire university. I have worked on projects related to efficacy of drug rehabilitation at community centres in Gauteng, efficient teaching methods to first year physics students, and results relating to music interventions in the university choir. Many projects that I come across present itself as rather interesting because of the exposure to other sciences and research methods- and ideas.

Something rather unusual, a project I worked on a while ago had to do with fishery and biodiversity data, and the number of fish harvested in that study was modelled best by a Poisson distribution! (You see it's funny because...)



2) It is rumoured that you play in an orchestra, tell us more?

I do dabble in the occasional theatre or city hall! Statistician by day, oboist by night (and over weekends). I am currently principal oboist in the Gauteng Philharmonic and travel to Durban often as ad-hoc oboist in the KwaZulu Natal Philharmonic. If you don't know what an oboe is, it's a woodwind instrument seated next to the flutes in an orchestra (but don't be lazy, you can look it up on Wikipedia).

3) What is your favourite part of being a lecturer?

Many people tend to underestimate the typical work day of a lecturing staff member of a university. I not only teach WST 211 and 221, but also an honours course in sampling techniques (SFT 720). Then I am also supervising some postgraduate students (honours and masters). Furthermore I do consultation for other postgraduate students and researchers within the university. My own studies and articles stemming from that is also a big component of what being a “lecturer” is all about. I love it all! Also, the work environment is flexible with regards to working hours which is rather convenient at times.

4) Where do you picture yourself ten years from now?

Celebrating the 10 year anniversary of you asking me this question. Kidding!

5) How are you current studies going and would you recommend pursuing post-graduate studies?

I am currently in the 2nd year of my PhD studies and it is going just swell *nervous laughter*. The work in my PhD covers complex matrix variate distributions (huh?) and then bridging the gap between these distributions and electronic engineering, specifically wireless communications systems. Funky stuff!

In the current economic- and political climate it is crucial to make sure you stand out – and education is the only thing that no-one can ever take away from you. You’ve heard that expression, Knowledge is Power, and Power Corrupts? Study hard. Be evil. Without knowing the world you can’t conquer it!

6) If we were to invent a survival guide for students, what would you include in it?

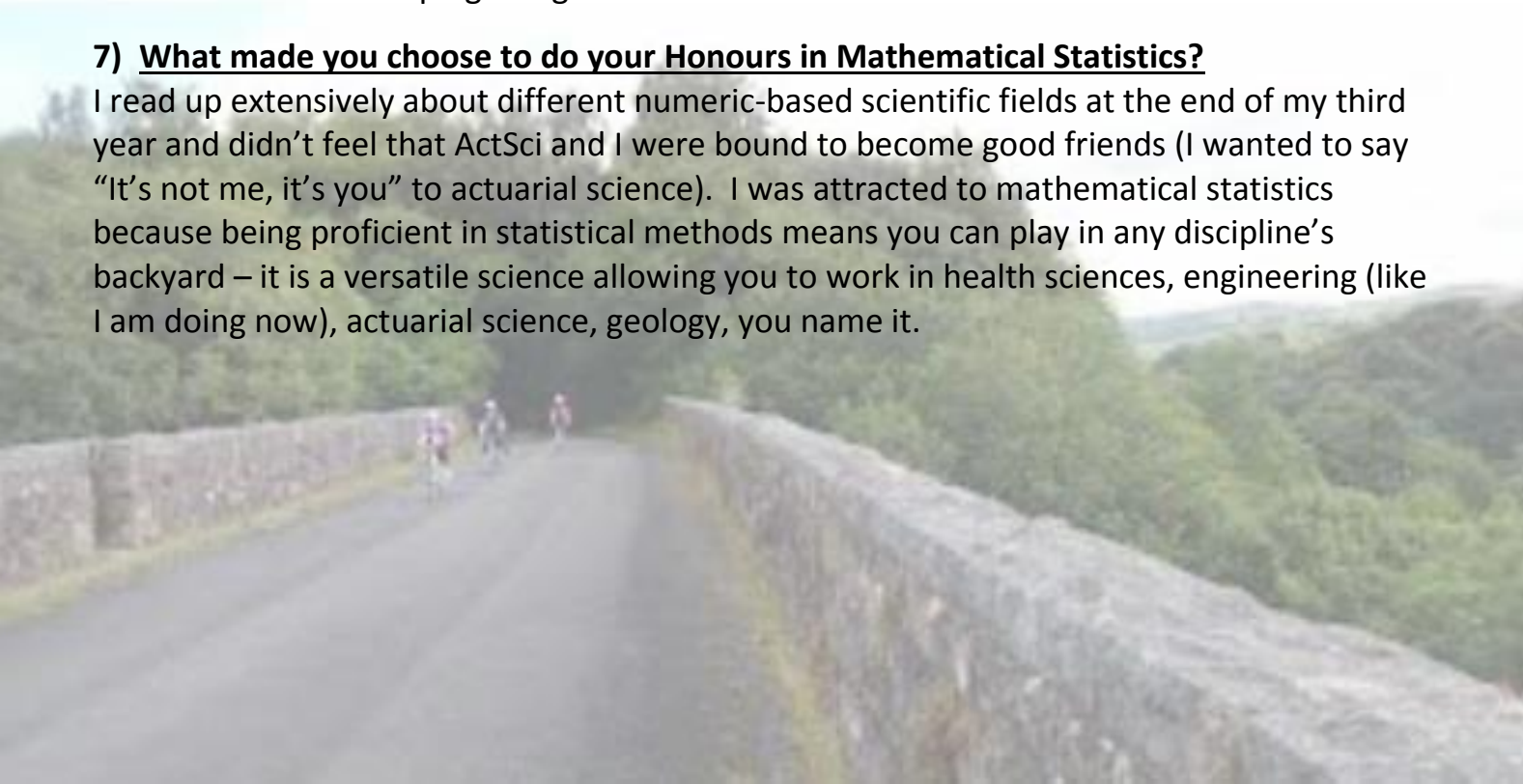
Female students: Beyoncé’s album, Lemonade

Male students: beard clipper

Those in between: earplugs to ignore the rest

7) What made you choose to do your Honours in Mathematical Statistics?

I read up extensively about different numeric-based scientific fields at the end of my third year and didn’t feel that ActSci and I were bound to become good friends (I wanted to say “It’s not me, it’s you” to actuarial science). I was attracted to mathematical statistics because being proficient in statistical methods means you can play in any discipline’s backyard – it is a versatile science allowing you to work in health sciences, engineering (like I am doing now), actuarial science, geology, you name it.



8) Who was your favourite lecturer and why?

Ms Amanda Verwey and Dr Jan-Harm van der Walt in the Department of Mathematics. Dr van der Walt took kindly to many of my requests to write class tests in Calculus 218 at different times when I had orchestra performances and rehearsals. Ms Verwey made algebra on 2nd year level very accessible, and I found her class always a comforting retreat from the rest of the Dementor-like 2nd year subjects.

9) How do you occupy your spare time (if you have any)?

Between three jobs, each job's free time is occupied by the other two, so I'd say I spend my free time working (I prefer it this way!). Idle hands are the devil's workshop...

10) What is the worst nightmare you have ever had?

#nerdalert, I dreamt some time last year that the IT building burnt down. Not that upsetting maybe, but all my PhD work was inside with no back up. THAT is the worst kind of nightmare!

-Kendyl Renzulli



CAREER EVENINGS:

This semester Aktua had two very insightful career evenings.

The first was presented to us by Rudolf Britz (Chief Actuary at Momentum Short-term Insurance) along with another actuarial staff member, who both completed their studies at Tuks. They highlighted the role an Actuarial Science graduate can play as part of their team, gave some great advice on working and studying further, and a detailed explanation of how short term insurance at Momentum works. Momentum short-term insurance specialises in personal, commercial and vehicle fleet insurance; providing protection for your valuable possessions and assets.

The second was presented by Christiaan Marais from MiWay Insurance, particularly for third year and honours students. The presentation emphasized

how some of the modules taken during the course of the degree are useful when working at MiWay and the kind of exposure and skills a graduate could possibly gain while working there. MiWay is a relatively new direct short-term insurer and financial services company and the first truly online-enabled short-term insurer in South Africa. They have some good technological advances, and their innovative nature sets them apart from other industry players.

For more information on either companies or becoming a part of them, you can visit www.miway.co.za and www.mmiholdings.co.za OR contact the Aktua Committee.

Brace yourself for more exciting career evenings next semester!

-Shingirai Muchenje

The logo for miway.co.za is displayed in white text on a red rectangular background. The word 'miway' is in a bold, lowercase sans-serif font, with '.co.za' in a smaller font size to its right.

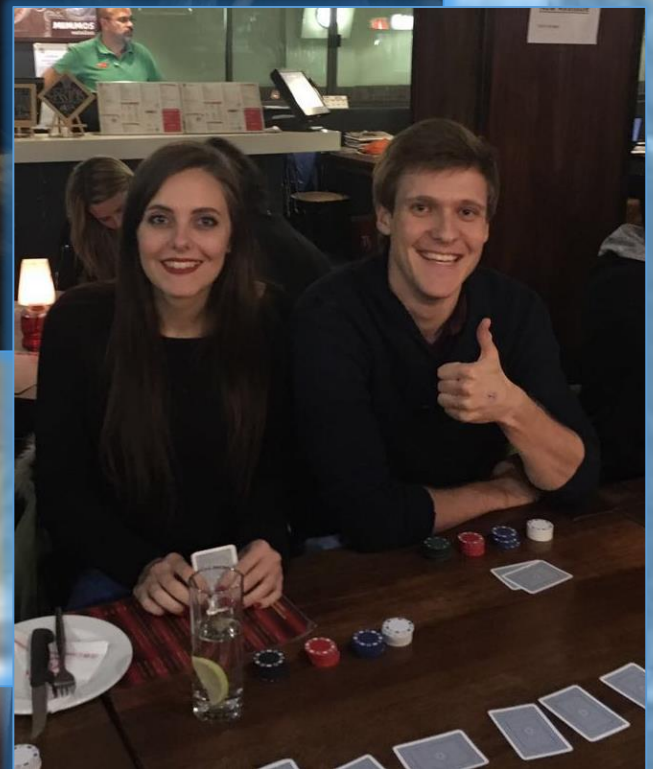
POKER NIGHT:

I must say the success of the poker evening exceeded both Megan and I's expectations as people poured in during the course of the evening. The beginners table was relaxed, giving us a chance to wrap our heads around the difference between a straight and a flush and also master the poker face. The bigger bluffs were at play at the advanced tables and there was a great energy throughout Mimmos. Could the two for one cocktail special have added to that buzz? Probably! It was great to see the students kick back, relax and have a good laugh.

Although Aktua brought all of our analytical and risk calculating skills to the table, it was one of the engineers who took the grand prize in the finals, a generous Mimmos voucher. Many thanks to all the actuarial and engineering students for making it fun night to remember!

-Hazel Makoní





Post graduate interview:

Estian Du Plessis:

1) Could you tell us a bit about yourself, specifically about your studies and what you are doing at the moment?

I finished my Honours in Actuarial Science in 2014 and started working at FirstRand in February 2015. My first job saw me sitting at WesBank as a Quantitative Analyst where I had to build a brand new behavioral scorecard model for the bank. I then rotated to FirstRand Group Enterprise Risk Management. My job there was to draft governance documents and audit regulatory capital models to check if they are SARB compliant. I then moved back to WesBank and I am currently doing the Basel reporting for one of the product houses. I am also involved in data governance and I will start building regulatory models towards the end of the year.

Regarding my studies...I have completed my CT subjects and I am studying for CA1 which I am writing in October this year. The next steps will be writing ST5, ST9 and the Banking Fellowship (which is the route industry prefers if you want to stay in banking).

2) How is the transition from study life to work/study life?

The transition is quite difficult. You do not have the luxury of time once you start working. My current boss actually set it out quite nicely: "You have to prioritise the work you are being paid to do". Your studies are not an excuse for work not getting done. It takes a lot of commitment and effort to get where you want to be with your studies and your free time is quite limited; but it is a small price to pay for the benefits of being qualified.

3) How is your progress through the actuarial exams going and which exams stand out in your mind and why?)

My progress has been quite slow since I started working. I attempted CT5 in April 2015 and passed; but I was not so lucky with CA1 in the second session.

In my mind CA1 has been the most difficult subject to write. Studying the large volume of work is quite time consuming and I did not get time to practice a lot of exam papers in my previous attempt.

The ST subjects may have less volume but are far more technical than CA1. I would thus say that the more time you have to spend on a subject, the harder it will be (considering the limited time you have once you start working).

4) Finally, is there any advice you have for any prospective and current actuarial students, both in undergrad and honours?

Use your time wisely while you have it. Try to finish all your exams on university, because once you start working time will be limited. This may also be a bonus for the gold diggers: The more exams you have, the more you get paid. You also move up the ranks quicker because you can focus your energy on what you are actually getting paid to do (i.e. your job). And lastly, you will have a better quality of life once you are qualified; so put in the time now and reap the rewards early in your career.

- Alan Wrigglesworth

AGIE SE MAGIE

(Through the eyes of a student)

FIRST YEAR:

How has first year been? Well, varsity is easy!

That's the answer I'd like to give every time when I'm asked how my first year is. Being at university is no child's play. Adjusting to varsity life and the workload is challenging. Actuarial science isn't making the transition any easier. Everyday feels like I'm going to work because I have class from 7:30 until 16:30, obviously with a few breaks in between.

However, I think that what gets me up every morning is the fact that I love what I'm studying. I love being challenged intellectually and that's why I have no doubt in my mind that Actuarial science is for me. I came here fully knowing that it is not going to be an easy ride but I know I'm going to get this degree. The focus should always be on the bigger picture. I'm not the first one to do Actuarial science first year and I'm not going to be the last.

In addition, I'm thankful for the challenges I face because I know they build character and resilience. No matter how hard anything can be in life we should not fail to recognize the opportunities for wisdom and growth that accompany adversity.

In conclusion, I'd like to wish everyone the best of luck for the upcoming exams. And note to yourself: "I owe it to myself to not settle for mediocrity."

"Hard work and Consistency is key!" -Kutlwano M.

-Ipeleng Kutumela

SECOND YEAR:

"Study Actuarial Science" they said. "It shall be fun" they said. Well, for me, it has been a roller coaster ride and I'm strapped in. Second year so far has undoubtedly been an interesting experience. From being loyal and attending every class to skipping only a few, and then later thinking you can pass Linear Algebra from simply studying from the textbook alone, only to regret your naïve decisions after the first semester test and waking up for your 7:30s again.

It hasn't all been nasty and shambles though, I have learnt a lot during these last few months, especially about myself. I have come to know that self-discipline is extremely important. That new season of Game of Thrones can wait until I have written my second semester test for Stats. I can live without knowing what mischief Lannister Lyon is up to in season 2. Also, my time management skills and work ethic have gone to new heights. In summary, throughout all those late nights and foggy Mondays, I have grown.

Once again, it is exam season now. Here's the funny thing about exams, they bring about so much hope: a last opportunity to revive your final mark. We will be faced with the one paper that determines whether or not you get that exemption. There are no second chances. No pressure. All I can do now is put in that study time and hope I am not asked to write my second year experience again next year but rather my third year experience.

Good luck with exams! And may the odds be ever in your favour.

-Regomoditswe Pilane and Tshiamo Makinta

THIRD YEAR:

If I were asked to describe third year in 4 words it would be these: "Theorem, Proof, Rinse, and Repeat".

This, as a friend of mine put it, is a perfect summary of our daily schedule as a third year Actuarial student. We have been running around like headless chickens this semester and I think that if any of us didn't know what true stress felt like before, we certainly do now.

Pulling all-nighters to complete those never ending SAS assignments, having nightmares about WTW 310 and skipping classes just so that we could study for those classes were just some of the highlights (come on guys, it was fun. *laughs nervously*) of this rollercoaster of a semester.

It's a great feeling being here however. This is our FINAL year. Soon we will finally be able to call ourselves Actuarial graduates, take some graduation cap selfies and say 'Look Momma, I made it'.

But first things first, it's time for the dreaded E-word.

Good luck to my fellow third years, we're almost there!

When you leave all your
assignments until the
last minute



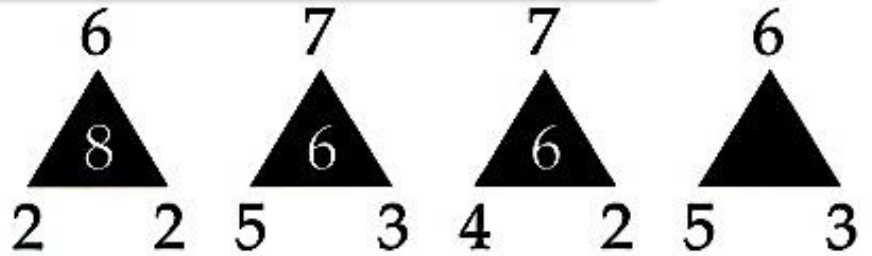
-Catherine Halsey

Fun and games:

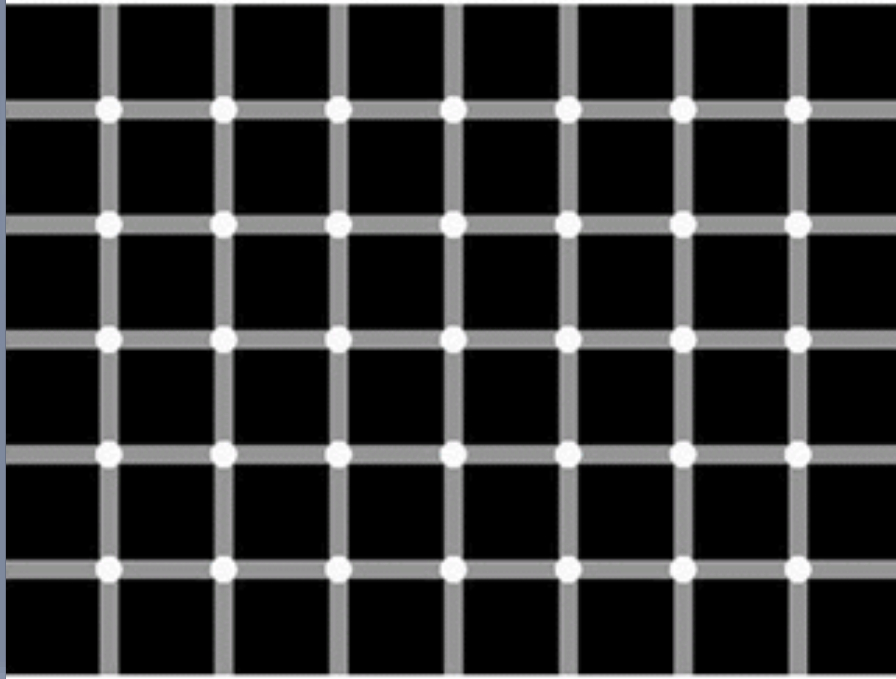
1 What number comes inside the circle?



2 Which number should be in the empty triangle?

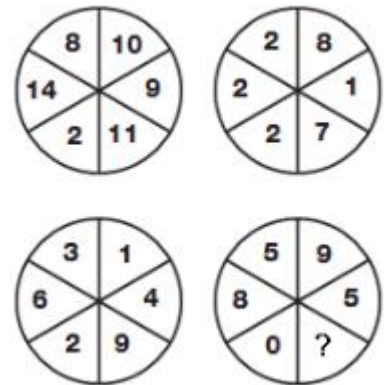


3 Count all the black dots you can see.



Which number replaces the question mark?

4



5 What is this a picture of?



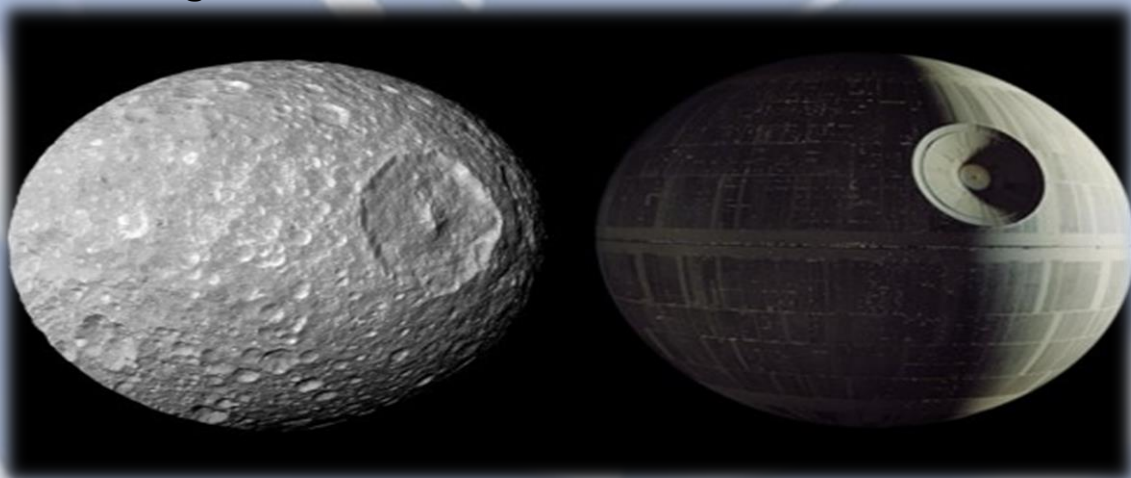
Death star looming in our very own galaxy?

Even if you have not watched Star Wars before, you know who Darth Vader is. The Death Star was his large disintegration ray. However, it did not disintegrate people, it blew up entire planets, and it has been discovered that one exists in our very own solar system...

There is no need to panic, though, because it is of no threat to us. It is actually one of Saturn's moons and it is called Mimas. It has a large crater on its face, which bears a striking resemblance to the super laser focus lens of the Death Star, thought to be the result of a large asteroid striking the moon.

The moon was discovered in 1789 by William Herschel, a British astronomer. Mimas is 396 kilometres in diameter, which is less than the distance from Pretoria to Bloemfontein. Ironically the name, Mimas, originates from one of the giants from Greek mythology.

Who knows whether the moon is the inspiration for George Lucas' Death Star or if this is some crazy coincidence? Since it will not be firing at Earth, one thing is for sure... The force is in fact with us.



-Triston Maraj

ANSWERS TO PUZZLES: (1) 6 (2) 3 (3) There are no black dots. Focus on each dot individually and you will notice that they are all white. (4) 2 (5) A cow looking towards you.