YEAR 12 – MATHEMATICS (Week 33)

Subject	Mathematics (Pure Math & Stats)
Class/ Section	Year 12 – Batch 1, 2 and 3
Week	2 nd May to 6 th May 2021
Work send to students by	Group email / Google classroom / Zoom
Total number of lessons per week	6
Units	PURE MATH- Ch14 (Exponentials and logarithms)14.7 Working with natural logarithms14.8 Logarithms and non-linear data (revision)STATISTICS – Book 2 – Ch 3 (The Normal Distribution)
Lesson1& 2- Live Zoom lesson	PURE MATH- Ch14 (Exponentials and logarithms) 14.7 Working with natural logarithms Learning objective – To describe and use the natural logarithm function.
	that logarithms are the inverse of exponential functions to solve equations involving powers and logarithms.e $^l n x = l n(e ^x) = x$
Tasks	To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.
Resources	Power point presentation Pure Mathematics Year 1 / AS <u>https://www.physicsandmathstutor.com/</u> <u>https://www.drfrostmaths.com/</u> <u>https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/</u>
Lesson3- Live Zoom lesson	PURE MATH- Ch14 (Exponentials and logarithms)
	Learning objective – To use logarithms to estimate the values of constant in non-linear models .
	Intended Learning Outcomes : Students will be able to use logarithms to manage and explore non-linear trends in data
Tasks	To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.

New Horn point provided and the second structure1. Pure Mathematics Year 1 / AS2. Inters //www.physicsandmathistutor.com/3. https://www.examoduluions.net/a-levelmaths/edevcel/edevcel.a- level-maths-past-papers/Lessons 4-Live Zoom lessonBook 2 Chapter 3: 3.6 - Approximating a binomial distribution.Learning objective a normal distribution.Intended Learning Objective To approximate a binomial distribution using a normal distribution.Intended Learning Objective To approximate a binomial distribution using a normal distribution.Intended Learning Objective To approximate a binomial distribution using a normal distribution.Intended Learning Objective To approximate a binomial distribution using a normal distribution.Intended Learning Objective To approximate a binomial distribution to approximate a binomial distribution we need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(np) and the values of µ and σ in the normal approximation N(μ, σ^2). If n is large and proximate a binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $X_{\perp} = np$ and $\sigma = \sqrt{np(1-p)}$ TusksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break our const during Zoom lesson to encourage collaborative learning.Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective To carry out a hypothesis test for the mean of a normal distribution.Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distr	Descurrens	Power point presentation
1 Prime Mathematics Feat 177352 Pritoss//www.drfcostmaths.com/ 3 https://www.examoduluions.net/a-levelmaths/edevcel/edevcel.a- level-maths-past-papers/Lessons 4-Live Zoom lessonBook 2 Chapter 3: 3.6 - Approximating a binomial distribution. Learning objective - To approximate a binomial distribution using a normal distribution.Intended Learning Outcomes Students will be able to consider the binomial random variable X - B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution will be able to consider the binomial farmdom variable X - B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate of n and p in B(np) and the values of µ and o in the normal approximation is valid, and learn the relationship between the values of n and p in B(np) and the values of µ and o in the normal approximation N(µ, \sigma ²). If n is large and p is close to 0.5, then the binomial distribution N(µ, σ ²) where µ = np and approximated by the normal distribution N(µ, σ ²) where µ = np and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.dricostmaths.com/ 4. https://www.dricostmaths.com/ 5. https://www.dricostmaths.com/ 2. Statistics and Mechanics Year 2 3. 7 - Hypothesis testing with the normal distributionLessons 5-Live Zoom lessonLearning Outcomes 2. Statistics rand functions. Intended Learning Outcomes 3. 7 - Hypothesis testing with the normal distributi	Resources	1 Duro Mothematica Vean 1 / AS
IntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionIntroductionInternationIntroductionInternationInt		1. Pure Mainematics Fear 17 AS
3 https://www.examoultimes.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/ Lessons 4-Live Zoom lesson Book 2 Chapter 3: 3.6 - Approximating a binomial distribution. Learning objective - To approximate a binomial distribution using a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X - B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of µ and o in the normal approximation N(µ, σ^2). If n is large and p is close to 0.5, then the binomial distribution N(µ, σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ Tasks To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. I. Power point presentation 2. Statistics and Mechanics Tear 2 3. https://www.athsicsandmalistutor.com/ 4. https://www.athsicsandmalistutor.com/ 5. https://www.athsicsandmalistutor.com/ 6. https://www.athsicsandmalistutor.com/ 7. levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-		2 <u>https://www.physicsandmathstutor.com/</u>
4. https://www.examolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths/past-papers/ Lessons 4-Live Zoom lesson Book 2 Chapter 3: 3.6 – Approximating a binomial distribution. Learning objective a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation N(μ , σ^2). If n is large and p is close to 0.5, then the binomial distribution X ~ B(n, p) can the approximated by the normal distribution N(μ , σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ Tasks To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.extraolotions.net/e_ teveInmaths/edexcel/edexcel/a-level-maths-past-papers/ Lessons 5-Live Zoom lesson Book 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective – To carry out a hypothesis test for the mean of a normal distribution. Intended Learning Objective – To carry out a hypothesis test for the mean of a normal distribution. Intended Learning Objective – To carry out a hypothesis test for the mean of a normal distribution. Intended Learning Objective – To carry out a hypo		3 <u>https://www.drfrostmaths.com/</u>
Lessons 4-Live Zoom lesson Book 2 Chapter 3: 3.6 Approximating a binomial distribution. Learning objective a normal distribution. Learning objective Learning objective a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ Tasks To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. Resource 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.aftrostmaths.com/ 4. https://www.aftrostmaths.com/ 5. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 6. https://www.aftrostmaths.com/ 7. https://www.aftrostmaths.com/ 7. https://www.aftrostmaths.com/ 8. https:		4. <u>https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-</u>
Lessons 4-Live Zoom lesson Book 2 Chapter 3: 3.6 - Approximating a binomial distribution. Learning objective a normal distribution. To approximate a binomial distribution using a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $X(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X = B(n, p)$ can be approximated by the normal distribution $X(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ Tasks To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. I. Power point presentation Statistics and Mechanics Year 2 Book 2 Thips://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/e		level-maths-past-papers/
Lessons 4-Live Zoom lesson Book 2 Chapter 3: 3.6 Approximating a binomial distribution. Learning objective a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution we need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation N(μ, σ^2). If n is large and p is close to 0.5, then the binomial distribution X = B(n, p) can be approximated by the normal distribution N(μ, σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ Tasks To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. I. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.driostandhscutor.com/ 4. https://www.driostandhscutor.com/ 5. https://www.driostandhscutor.com/ 5. https://www.driostandhscutor.com/ 6. https://www.driostandhscutor.com/ 6. https://www.driostandhscutor.com/ 6. https://www.driostandhscutor.com/ 7. https://www.drio		
Chapter 3: 3.6 - Approximating a binomial distribution.Learning objective a normal distribution.Intended Learning Outcomes Students will be able to consider the binomial random variable $X \sim B(n, p)$. It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTasksResource1. Power point presentation 2 . Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.1. Power point presentation 2 . Statistics and Mechanics Year 2 3 . https://www.examsolutions.net/a- level-maths/edexcel/edexcel-al-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective a normal distribution.Learning objective a normal distribution.Learning objective a normal distributionLearning objective a normal distribution.Learning objective a normal distributionLearning objective a normal distributionLearning objective a normal distributionResource2. Statistics and Mechanics Year 2 3 . https://www.efrostnaths.cem/ 5 . https://www.efrostnaths.cem/ 5 . https://www.efrostnaths.cem/ 5 . https://www.efrostnaths.cem/ 5 . https://www.efrostnaths.cem/ 5 . normally distributionLearni	Lessons 4–Live Zoom lesson	Book 2
3.6 - Approximating a binomial distribution. Learning objective - To approximate a binomial distribution using a normal distribution. Intended Learning Outcomes Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X - B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning. Resource 1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.aphysicsandmathstutor.com/ 4. https://www.aphysicsandmathstutor.com/ 5. https://www.aphysicsandmathstutor.com/ 6. https://www.aphysicsandmathstutor.com/ 7. Hypothesis testing with the normal distribution Leasons 5-Live Zoom lesson Book 2 Chapter 3: 3.7 Hypothesis testing with the normal distribution Leasons 5-Live Zoom lesson Book 2 Chapter 3: 3.7 Hypothesi		Chapter 3
InstantInstant distribution:Learning objective- To approximate a binomial distribution using a normal distribution.Intended Learning OutcomesStudents will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.dyriosis.andmathstutor.com/ 4. https://www.examsolutions.net/a level.maths/educe.l-a-level.maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distribution Learning objective – To carry out a hypothesis test for the mean of a normal distribution.Learning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes - Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{R} , is normally distributed with \overline{R} ~ $N(\mu, \sigma^2)$, the sample mean, \overline{R} , is normally distributed with \overline{R} ~ $N(\mu, \sigma$		3.6 - Approximating a binomial distribution
Learning objective a normal distribution.Learning objective - To approximate a binomial distribution using a normal distribution.Intended Learning Outcomes Students will be able to consider the binomial random variable $X ~ B(n, p)$. It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation is valid, and learn the relationship between the values of and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.amsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-paper		5.6 Approximating a binomial distribution.
Lessons 5-Live Zoom lessonTo complete the questions and Maximum distributionResource22. Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation N(μ , σ^2). If n is large and p is close to 0.5, then the binomial distribution $X ~ B(n, p)$ can be approximated by the normal distribution N(μ , σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Lessons 5-Live Zoom lesson1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.ybrisciandmathstutor.com/ 4. https://www.wdrfoostmaths.com/ 5. https://www.wdrfoostmaths.com/ 5. https://www.drfoostmaths.com/ 5. https://www.drfoostmaths.com/ 6. https://www.drfoostma		Learning chiesting To approximate a hipomial distribution using
a normal distribution.Intended Learning OutcomesStudents will be able to consider the binomial random variable $X \sim B(n, p)$. It can be difficult to calculae probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution X_{μ} , σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.admsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 Hypothesis testing with the normal distributionLearning objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a normal distribution.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with \overline{X} ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with \overline{X} ~ $N(\mu, \sigma^2)$, the sample mean \overline{X} is normally distributed with \overline{X} ~ $N(\mu, \sigma^2)$, the sample mean \overline{X} is normally distributed with \overline{X} ~ $N(\mu, $		<u>Learning objective</u> – To approximate a binomial distribution using
Intended Learning Outcomes-Students will be able to consider the binomial random variable $X \sim B(n, p)$. It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.drforstmaths.com/ 5. https://www.drforstmaths.com/ 5. https://www.drforstmaths.com/ 5. https://www.drforstmaths.com/ 5. https://www.drforstmaths.com/ 5. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 6. https://www.drforstmaths.com/ 		a normal distribution.
-Students will be able to consider the binomial random variable X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation N(μ, σ^2). If no is large and p is close to 0.5, then the binomial distribution X ~ B(n, p) can be approximated by the normal distribution N(μ, σ^2) where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drforstmaths.com/ 5. https://www.earnsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning Objective - To carry out a hypothesis test for the mean of a normall y distributed random variable by looking at the mean of a sample taken from whole population.N(μ, σ^2), the sample taken from strandom variable X ~ N(μ, σ^2), the sample mean, \overline{A} , is normally distributed with $\overline{X} ~$ N(μ, σ^2), the sample to the distribution of the acomor area on the sample to the distribution of the sample on the distribution from the mean of a sample taken from whole population.		Intended Learning Outcomes
Students will be able to consider the binomial random variable $X \sim B(n, p)$. It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation N(μ, σ^2). If n is large and p is close to 0.5, then the binomial distribution X $\sim B(n, p)$ can be approximated by the normal distribution N(μ, σ^2). If n is large and p is close to 0.5, then the binomial distribution X $\sim B(n, p)$ can be approximated by the normal distribution N(μ, σ^2). Where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.examsolutions.net/a levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5–Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distribution Learning Objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Objective – To carry out a hypothesis test for the mean of a a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$, two care use the distribution of the cample mean to a sample take		
X ~ B(n, p). It can be difficult to calculate probabilities for X when n is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation N(μ, σ^2). If n is large and p is close to 0.5, then the binomial distribution X ~ B(n, p) can be approximated by the normal distribution N(μ, σ^2). Where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5–Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distribution Learning objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a normal distribution.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} is normally distributed with $\bar{X} ~$ N(μ, σ^2), the sample mean, \bar{X} is normally distributed with $\bar{X} ~$ N(μ, σ^2). We can use the distribution of the canned on variable to mean to normally distributed with $\bar{X} ~$ N(μ, σ^2). We can use the distribution for the sample mean to normal distribution of the canned mean to		Students will be able to consider the binomial random variable
is large. In certain circumstances you can use a normal distribution to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n,p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.etmostand.scom/ 5. https://www.etmostand.scom/ 5. https://www.etmostand.scom/ 5. https://www.etamsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5–Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distribution Learning Objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim N(n, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(n, \sigma^2)$. We can use the distribution of the cample mean to $N(n, \sigma^2)$. We can use the distribution of the cample mean to $D(n) = 0$.		$X \sim B(n, p)$. It can be difficult to calculate probabilities for X when n
to approximate a binomial distribution. We need to understand the conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n, p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.ghrostmaths.com/ 4. https://www.ghrostmaths.com/ 5. https://www.etransolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.		is large. In certain circumstances you can use a normal distribution
conditions under which this approximation is valid, and learn the relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $X \sim B(n, p)$ can be approximated by the normal distribution $X \sim B(n, p)$ can be approximated by the normal distribution $X(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstuor.com/ 4. https://www.examsolutions.net/a- tevelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution $Intended Learning Outcomes$ -Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.		to approximate a binomial distribution. We need to understand the
relationship between the values of n and p in B(n,p) and the values of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X = B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.dtr/ostmaths.com/ 5. https://www.dtr/ostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning Objective — To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a a sample taken from whole population.For a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$.		conditions under which this approximation is valid, and learn the
of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p is close to 0.5, then the binomial distribution $X \sim B(n, p)$ can be approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.chriscsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.drfrostmaths.com/ 5. https://www.drfrostmaths.com/ 5. https://www.drfrostmaths.com/ 6. https://www.drfrostmaths.com/ 5. https://www.drfrostmaths.com/ 6. https://statistics and mechanics year 2 3. 7 – Hypothesis testing with the normal distributionLessons 5–Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$, the cample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to $N(\mu, \sigma^2)$. We can use the distributio		relationship between the values of n and p in $B(n,p)$ and the values
It is place to 0.5, then the binomial distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be approximated by the normal distribution X \rightarrow B(n, p) can be descent to encourage collaborative learning.TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distribution Learning objective \rightarrow To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ N(μ, σ^2). We can use the distribution of the sampla mean to ended the sample mean to		of μ and σ in the normal approximation $N(\mu, \sigma^2)$. If n is large and p
Is close to 0.5, then the ontonin the ustrotation $N(\mu, \sigma^2)$ where $\mu = np$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$.		is close to 0.5, then the binomial distribution $X \sim B(n, n)$ can be
approximated by the normal distribution $N(\mu, \delta)$ yield $\mu = hp$ and $\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.dyfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$.		is close to 0.5, then the binomial distribution $N(u, \sigma^2)$ where $u = m$ and
$\sigma = \sqrt{np(1-p)}$ TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfostmaths.com/ 5. https://www.drfostmaths.com/ 5. https://www.examsolutions.net/ar levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$.		approximated by the normal distribution $N(\mu, \sigma^2)$ where $\mu = np$ and
TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$.		$\sigma = \sqrt{np(1-p)}$
TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objectiveTo carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$		
TasksTo complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} ~$		
Tasksnotebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a-level-maths-past-papers/ Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} ~$		To complete the questions assigned from the Textbook (pdf) in their
Taskslesson to encourage collaborative learning.Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.ghysicsandmathstutor.com/ 4. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Learning objective a normal distribution.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ N(μ, σ^2). Wa can use the distribution of the sample mean to point the sample mean to point of the sample mean to point present the sample mean to point present and present to point present and present to point present to point present and present to point present and present to point present the present	Tasks	notebook. Students will be put in break out rooms during Zoom
Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distribution Learning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes -Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$. Wa can use the distribution of the sample mean to $normal carry on the population.$	1 4585	lesson to encourage collaborative learning.
Resource1. Power point presentation 2. Statistics and Mechanics Year 2 3. https://www.physicsandmathstutor.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Lessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 - Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ N(μ, σ^2). We can use the distribution of the sample mean to		resson to encourage contactrative rearrang.
Resource1. Four point point point post autoin2. Statistics and Mechanics Year 23. https://www.physicsandmathstutor.com/4. https://www.drfrostmaths.com/5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Book 2 Chapter 3: 3.7 – Hypothesis testing with the normal distributionLearning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size <i>n</i> taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$ $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		1 Power point presentation
Kesource 2. Statistics and Mechanics Teal 2 3. https://www.dyficstmaths.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ 2. Statistics and Mechanics Teal 2 3. https://www.drfrostmaths.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ 2. Statistics and Mechanics Teal 2 3. https://www.drfrostmaths.com/ 4. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ 2. Statistics and Mechanics Teal 2 3. https://www.drfrostmaths.com/ 5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/ 2. Statistics and Statistics	Descurres	2. Statistics and Machanics Vaca 2
3. https://www.physicsandmathstutor.com/4. https://www.drfrostmaths.com/5. https://www.examsolutions.net/a- levelmaths/edexcel/edexcel-a-level-maths-past-papers/Book 2 Chapter 3: 3.7 – Hypothesis testing with the normal distributionLearning objective – To carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size <i>n</i> taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$ N($\mu, \frac{\sigma^2}{2}$)	Kesource	2. Statistics and Mechanics Tear 2
4. <a <="" a="" https:="" www.drfrostmaths.com="">5. <a <="" a="" a-level-maths-past-papers="" https:="" www.examsolutions.net="">Lessons 5-Live Zoom lessonBook 2Chapter 3:3.7 - Hypothesis testing with the normal distributionLearning objective - To carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X}, is normally distributed with $\bar{X} \sim N(\mu, \sigma^2)$.		3. <u>https://www.physicsandmathstutor.com/</u>
5. https://www.examsolutions.net/a-level-maths-past-papers/ Lessons 5-Live Zoom lessonBook 2 Chapter 3: $3.7 -$ Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \frac{\sigma^2}{2})$. We can use the distribution of the sample mean to		4. <u>https://www.drfrostmaths.com/</u>
Internet levelInternet levelItessons 5-Live Zoom lessonBook 2 Chapter 3: 3.7 – Hypothesis testing with the normal distributionImage: Learning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ N(μ, σ^2), the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$		5. <u>https://www.examsolutions.net/a-</u>
Lessons 5-Live Zoom lessonBook 2 Chapter 3: $3.7 -$ Hypothesis testing with the normal distributionLearning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$.		levelmaths/edexcel/edexcel-a-level-maths-past-papers/
Chapter 3: 3.7 – Hypothesis testing with the normal distribution <u>Learning objective</u> – To carry out a hypothesis test for the mean of a normal distribution. <u>Intended Learning Outcomes</u> Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population. For a random sample of size <i>n</i> taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to	Lessons 5–Live Zoom lesson	Book 2
3.7 – Hypothesis testing with the normal distribution Learning objective – To carry out a hypothesis test for the mean of a normal distribution. Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population. For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		Chapter 3:
Learning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$.		3.7 – Hypothesis testing with the normal distribution
Learning objective a normal distribution.To carry out a hypothesis test for the mean of a normal distribution.Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable X ~ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$ $N(\mu, \frac{\sigma^2}{2})$. We can use the distribution of the sample mean to		
a normal distribution. Intended Learning Outcomes Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population. For a random sample of size <i>n</i> taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$ $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		<u>Learning objective</u> – To carry out a hypothesis test for the mean of
Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \bar{X} , is normally distributed with $\bar{X} \sim$ $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		a normal distribution.
Intended Learning OutcomesStudents will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population.For a random sample of size n taken from a random variable $X \sim$ $N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim$ $N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		
Students will be able to test hypotheses about the mean of a normally distributed random variable by looking at the mean of a sample taken from whole population. For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		Intended Learning Outcomes
hormally distributed random variable by looking at the mean of a sample taken from whole population. For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		Students will be able to test hypotheses about the mean of a
For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$.		normally distributed random variable by looking at the mean of a
For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		according to the from whole converting at the mean of a
For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		sample taken from whole population.
For a random sample of size <i>n</i> taken from a random variable $X \sim N(\mu, \sigma^2)$, the sample mean, \overline{X} , is normally distributed with $\overline{X} \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		For a rendem complete faire talent former 1 11 V
$N(\mu, \sigma^2)$, the sample mean, X, is normally distributed with $X \sim N(\mu, \sigma^2)$. We can use the distribution of the sample mean to		For a random sample of size <i>n</i> taken from a random variable $X \sim \frac{1}{2}$
$N(u, \frac{\sigma^2}{2})$ We can use the distribution of the sample mean to		$N(\mu, \sigma^2)$, the sample mean, X, is normally distributed with $X \sim 1$
$(\mu, \frac{1}{n})$. We can use the distribution of the sample mean to		$N(\mu, \frac{\sigma^2}{n})$. We can use the distribution of the sample mean to

	determine whether the mean from one particular sample, \overline{X} , is statistically significant.
Tasks	To complete the questions assigned from the Textbook (pdf) in their notebook. Students will be put in break out rooms during Zoom lesson to encourage collaborative learning.
Resource	 Power point presentation Statistics and Mechanics Year 2 <u>https://www.physicsandmathstutor.com/</u> <u>https://www.drfrostmaths.com/</u> <u>https://www.examsolutions.net/a-levelmaths/edexcel/edexcel-a-level-maths-past-papers/</u>
Lessons 6 – GOOGLE CLASS	Statistics and Mechanics Year 2
ROOM	
	To do problems involving the normal distribution.
	Intended Learning Outcome:
	By the end of the lesson students will be able to do problems from the Mixed Exercise – Chapter 3 – Questions 3, 5, 9, 11, 17, 22, 24 – From Pages 60 to 63
Tasks	Work will be assigned in Google Classroom.
Resource	Text Book : Statistics and Mechanics Year 2