Statistics Past Paper Questions by Topic: The following

questions are applicable to the 2017 onwards specification, but are taken from the old specification. However, the marks available for questions in the new A-level may be less due to the increased usage of calculators. Remember ensure you show adequate working!

Representing Data

Mean

- S1 June 2014 Question 6(c)
- S1 June 2013 Question 4(a)
- S1 January 2013 Question 5(c)
- S1 January 2011 Question 5(b)
- S1 January 2011 Question 2
- S1 January 2010 Question 3(a)(b)(c)
- S1 January 2008 Question 2(a)

Median and Quartiles

- S1 June 2014 Question 6(b)
- S1 June 2013 Question 4(b)
- S1 January 2013 Question 5(b)
- S1 January 2012 Question 4(b)
- S1 January 2011 Question 5(a)
- S1 January 2011 Question 2
- S1 January 2010 Question 3(d)
- S1 January 2008 Question 2b

Standard Deviation

- S1 June 2014 Question 6(c)
- S1 June 2013 Question 4(a)
- S1 January 2013 Question 5(c)
- S1 January 2011 Question 5(b)
- S1 January 2010 Question 3(c)
- S1 January 2008 Question 2(a)

Statistical Diagrams

- S1 June 2014 Question 6(a)
- S1 June 2014 Question 1
- S1 June 2013 Question 2(b)(c)(d)
- S1 January 2013 Question 5(a)
- S1 June 2012 Question 5
- S1 January 2012 Question 4
- S1 January 2011 Question 3
- S1 January 2010 Question 2
- S1 June 2008 Question 2

Probability

Tree Diagrams

- S1 June 2014 Question 4
- S1 June 2012 Question 7
- S1 January 2011 Question 7
- S1 January 2010 Question 1
- S1 June 2010 Question 2
- S1 June 2008 Question 1

Venn Diagrams

- S1 June 2014 Question 8
- S1 June 2013 Question 3(d)(e)
- S1 January 2013 Question 7
- S1 June 2012 Question 4
- S1 January 2012 Question 6
- S1 June 2011 Question 6
- S1 January 2010 Question 4
- S1 June 2010 Question 4
- S1 January 2008 Question 5

Discrete Random Variables

Binomial Distribution

- S2 June 2014 Question 4
- S2 January 2013 Question 3
- S2 June 2012 Question 8
- S2 January 2012 Question 3
- S2 June 2011 Question 5(b)
- S2 June 2011 Question 4(c)
- S2 January 2009 Question 5(a)(b)

Normal Distribution

Normal Distribution

- S1 June 2014 Question 7
- S1 June 2013 Question 6
- S1 January 2013 Question 4
- S1 June 2012 Question 6
- S1 January 2012 Question 7
- S1 June 2011 Question 4
- S1 January 2011 Question 8
- S1 June 2010 Question 7
- S1 January 2010 Question 7
- S1 June 2008 Question 7
- S1 January 2008 Question 6

Statistical Approximations

Normal Approximation to the Binomial Distribution

• S2 June 2011 - Question 6

Hypothesis Tests

Binomial Distribution Hypothesis Tests

- S2 June 2014 Question 5(c)(d)
- S2 January 2013 Question 6
- S2 June 2012 Question 2
- S2 January 2012 Question 2
- S2 June 2011 Question 6
- S2 January 2009 Question 3

Binomial Distribution Hypothesis Tests – Normal Approximation

• S2 June 2014 - Question 5(c)(d)

Normal Distribution Hypothesis Tests

• S3 June 2010 - Question 1

Normal Distribution Hypothesis Tests (Difference of means) – You haven't done central limit theorem. But you can do all these questions ignoring that aspect. If you would like to understand the central limit theorem please see this resource:

• Central limit theorem

Questions:

• Maths and Physics Tutor Collection of questions

Correlation and Regression –New Spec Maths Genie

This has changed too significantly but Maths Genie have posted a set of questions by topic for all new A-level content. Here is a link to the AS and A-level correlation ones. The other topic questions will also be useful for revision. **This site also contains videos for each topic.**

- Maths Genie (AS) Correlation and Regression Questions
- Maths Genie (AS) Correlation and Regression Answers
- Maths Genie (A Level) Correlation Hypothesis Testing Questions
- Maths Genie (A Level) Correlation Hypothesis Testing Answers

Mechanics Past Paper Questions by Topic: The following

questions are applicable to the 2017 onwards specification, but are taken from the old specification. However, Mechanics has not significantly changed so these will be similar.

Kinematics - Constant Acceleration

Motion in a Straight Line

- M1 June 2014 Question 3
- M1 June 2013 Question 4
- M1 June 2012 Question 5
- M1 June 2011 Question 1
- M1 June 2009 Question 1
- M1 January 2009 Question 2
- M1 June 2008 Question 2

Velocity Time Graphs

- M1 June 2013 Question 5
- M1 January 2013 Question 5
- M1 June 2012 Question 4
- M1 June 2011 Question 4
- M1 January 2010 Question 2
- M1 June 2008 Question 4

Velocity Vectors

- M1 June 2013 Question 7
- M1 January 2013 Question 6
- M1 June 2012 Question 6
- M1 January 2012 Question 7
- M1 June 2011 Question 7
- M1 June 2010 Question 1
- M1 January 2010 Question 7
- M1 June 2009 Question 8
- M1 January 2009 Question 1
- M1 June 2008 Question 3
- M1 January 2008 Question 6

Resolving Forces

• M1 June 2014 - Question 6

Statics of a Particle

Equilibrium

- M1 June 2014 Question 1
- M1 January 2013 Question 3
- M1 January 2010 Question 3

Friction

- M1 June 2013 Question 3
- M1 June 2012 Question 3
- M1 June 2011 Question 3
- M1 June 2009 Question 5
- M1 January 2009 Question 5

Equilibrium of a Rigid Body

Moments

- M1 June 2014 Question 4
- M1 June 2013 Question 6
- M1 January 2013 Question 2
- M1 June 2012 Question 2
- M1 January 2012 Question 4
- M1 June 2011 Question 5
- M1 January 2010 Question 4
- M1 June 2009 Question 7
- M1 January 2009 Question 4
- M1 June 2008 Question 6
- M1 January 2008 Question 5
- M2 June 2013 Question 5
- M2 January 2013 Question 3
- M2 January 2012 Question 5
- M2 June 2011 Question 7
- M2 January 2011 Question 7
- M2 June 2010 Question 6

Dynamics

Newton's Law of Motion (F = ma)

• M1 June 2014 - Question 2

Lift Problems

• M1 June 2013 - Question 2

Connected Particles

- M1 June 2014 Question 7
- M1 June 2013 Question 8
- M1 January 2013 Question 7
- M1 June 2011 Question 6
- M1 June 2010 Question 8
- M1 January 2010 Question 6
- M1 January 2009 Question 7
- M1 January 2008 Question 7

Projectiles

Projectiles

- M2 June 2013 Question 6
- M2 January 2013 Question 6
- M2 January 2012 Question 7
- M2 June 2011 Question 8
- M2 January 2011 Question 6
- M2 June 2010 Question 7

Kinematics 2

Motion with Variable Acceleration

- M2 June 2013 Question 3
- M2 January 2012 Question 2
- M2 June 2011 Question 6
- M2 January 2011 Question 3

• M2 June 2010 - Question 1