

Greg's AP Live videos 2020

The 2017 exam problem 3, QQT – disk collides with rod

<https://www.youtube.com/watch?v=RvF0bb6XYIk>

The 2016 exam problem 3, QQT, The Bumpy Track

<https://www.youtube.com/watch?v=n8sMqiERIIM>

Rotational Kinematics

<https://youtu.be/ixslR0yKytA>

Kinematics and the Definition of Acceleration

<https://www.youtube.com/watch?v=qDs7NTx4NR0>

Conservation of Angular Momentum

<https://www.youtube.com/watch?v=zwx9SWPhH6M>

The 2019 Exam — Problem 3, Experiment - Spring Constant of a Projectile Launcher

<https://www.youtube.com/watch?v=ei3h1XYGIYM>

Problem solving with Energy

<https://www.youtube.com/watch?v=wlwczITP3c0>

Energy Bar Charts

https://www.youtube.com/watch?v=qBGnzg_77oA

The 2019 exam problem 2, modified atwood

<https://www.youtube.com/watch?v=0uhEr6eMzy8>

The 2017 exam problem 2, experiment – Static friction coefficient.

https://www.youtube.com/watch?v=tt6b1_TYmtI

The 2018 exam problem 5, paragraph – inelastic collision and spring

<https://www.youtube.com/watch?v=hY5wG85hdQs>

The 2018 exam problem 3 QQT, variable frictional torque

<https://www.youtube.com/watch?v=X6TrWG6se6g>

The 2021 exam problem 4, sliding and rolling down an incline

Simulation*: <https://computercow.altervista.org/SoME1/justsim.html>

Video: <https://www.youtube.com/watch?v=jQa54mtU3JY&t=633s>

**Simulation by Milo Jacobs. The simulation is referenced in the video.*

Torque in Equilibrium

<https://youtu.be/c1EX4KOBbIc>

Experimental Design: Torque in Equilibrium

<https://youtu.be/sIEIJ30bVvI>

Rotation - Newton's Second Law

<https://youtu.be/VX8SeUXCubk>

Connecting Angular and Linear Speed

<https://youtu.be/CZV2x1c9Aq8>

Rotational Kinetic Energy

<https://youtu.be/srCMQyhZrC0>

Conservation of Angular Momentum

<https://youtu.be/zwx9SWPhH6M>

Forces in Equilibrium

<https://youtu.be/fAwOkXMZUJU>

Two body problems

<https://www.youtube.com/watch?v=4hZOhBsDwCU>

The ones below are by Josh

The 2017 exam problem 4, Ball Sliding on Two Differently-Shaped ramps

<https://www.youtube.com/watch?v=xgRtO7owzN4>

Simple Harmonic Motion

<https://www.youtube.com/watch?v=G79UqC27N44>

The 2019 exam problem 1, v-t graph of the center of mass

https://www.youtube.com/watch?v=xZaMHg1hP_A

Circular orbits

<https://www.youtube.com/watch?v=ugAcd8JExNo>

Gravitational Field and force; inertial and gravitational mass

<https://www.youtube.com/watch?v=0fYAelQUr10>

Circular motion

<https://www.youtube.com/watch?v=nlZvNrE1dS8>

Conservation of Linear momentum

<https://www.youtube.com/watch?v=vwYIHypDUqE>

Projectile motion

<https://www.youtube.com/watch?v=Ty8q8lFrPX0>

Connecting angular and linear speed

<https://www.youtube.com/watch?v=CZV2x1c9Aq8>

The 2018 exam problem 1 – circular orbits

<https://www.youtube.com/watch?v=ugAcd8JExNo>

Gravitation and orbits

<https://www.youtube.com/watch?v=MvBdGa3Am9U>

Rotational kinetic energy

<https://www.youtube.com/watch?v=srCMQyhZrC0>

Torque in equilibrium

<https://www.youtube.com/watch?v=c1EX4KOBbIc>