

Categorization of released AP Physics 1 FRQs

This chart refers to AP Physics 1 problems that the College Board has released online. This chart does not refer to the unreleased sample exam problems that the College Board has also released to teachers.

Year	Problem 1	Problem 2	Problem 3	Problem 4	Problem 5
2016	Three-spoked wheel rolls down a ramp without slipping	Allegedly elastically bouncing ball	Cart rolls down inclined track that has speed bumps	Circuit with ideal battery and four identical resistors	Standing wave in hanging string
	FBD Torque Moment of inertia Rotational KE	Types of collision Kinetic energy Experimental design	Forces Kinematics	Voltage DC circuits Ohm's law Resistor combinations	Forces Wave speed Standing waves
	13 minutes 7 points	25 minutes 12 points	25 minutes 12 points	13 minutes 7 points	13 minutes 7 points
	BOLD (FBD for torques) DID-CABy DID-CABp (problem statement compels student to provide two lines of reasoning to support the same answer)	PEA-BOOLEAN BOLD (know that independent variable goes on vert. axis and dependent variable goes on horiz. axis) TOM-VIOL	BOLD (routine graphing) DID-CABp MXB DID-EMS	DID-RIO DID-CABp	DID-CABy PLR
2015	Masses and string draped over two pulleys	What gets used up in a lightbulb?	Spring launches a mass over an eventually rough surface	Two spheres, one launched horizontally, fall to the ground	Oscillator
	FBD Newton's 2 nd law Judicious choice of "system"	Experimental design Ohm's law Voltsmeters and ammeters	Work and energy Force	FBD Kinematics	Wave speed Standing waves
	13 minutes 7 points	25 minutes 12 points	25 minutes 12 points	13 minutes 7 points	13 minutes 7 points
	BOLD DID-WHA?	PEA-BOOLEAN MXB	BOLD TOM-CR	BOLD PLR (in style of WEE-Y (c))	DID-CABy (extended to 4 objects) BOLD (routine functional analysis/graphing)

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Year	Problem 1	Problem 2	Problem 3	Problem 4	Problem 5
Course description 2015 p. 177-181	Sound generator and two tubes	Colliding carts	Carts traveling around a track with semicircular and straight segments		
	<i>Possibly descended from AP Physics B 2004 (Form B) # 3</i>				
	Standing waves	Designing experimental procedure, analysis Momentum Kinetic energy	Kinematics Newton's 2 nd law		
	12 minutes 7 points	25 minutes 12 points	25 minutes 12 points		
	PLR	Aspect of MXB PEA-VAL PEA-BOOLEAN	BOLD Parts (b) and (c) together form a WEE-Y/D .		
Sample questions 2014 p. 6-8	Set of chimes	Student swings and grabs a jug of water			
	Standing waves speed of sound	Mechanical energy is not conserved during inelastic collisions Momentum is not conserved during processes subject to a finite impulse			
	(Not provided in College Board document), estimate: 13 minutes 7 points	(Not provided in College Board document), estimate: 13 minutes 7 points			
	PEA-VAL MXB	DID-WHA? WEE-HOW			