Workshop for STACK Beginners

Chris Sangwin

School of Mathematics
University of Edinburgh

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Plan

1. What is STACK?
2. Philosophy of the design (5 mins max!)
3. Write your first question.

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- Generate random questions.
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- Establish the mathematical properties of those answers with CAS. (Maxima)
- Formative, summative and evaluative outcomes. (i.e. feedback, score)

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- We need assessment worth teaching to.
- We need to take responsibility.

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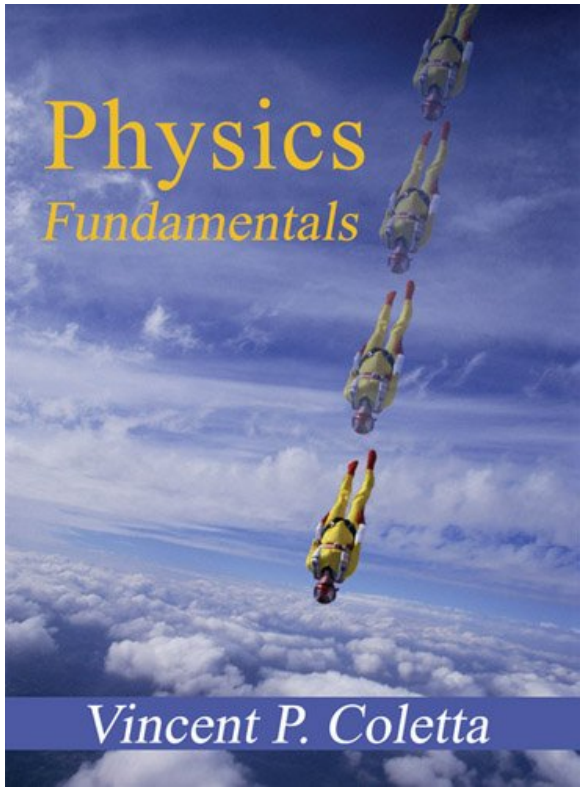
... and this was obvious long ago.

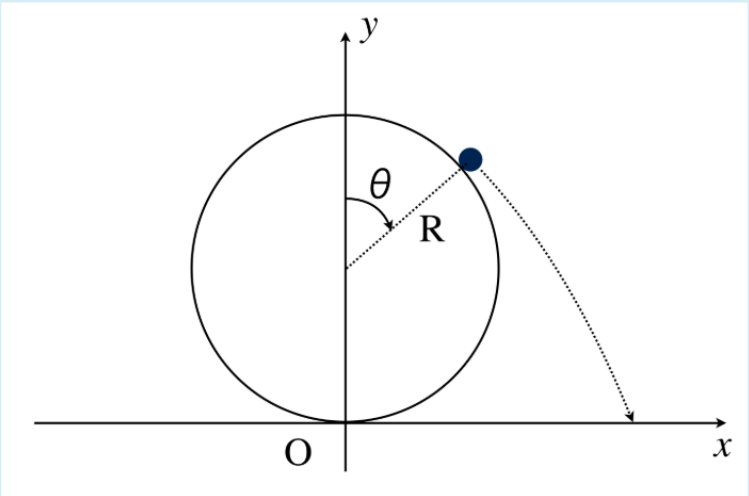
Commercial partners

Physics Fundamentals by Vincent Coletta. Physics Curriculum & Instruction
1600 online homework problems in STACK



Widely used internationally

床の上に，表面の滑らかな球（半径がR）が置かれており，床と球が接しているところを原点とする。球の頂点$(0, 2R)$から，重力（重力加速度g）により，質量mの質点が初速度ゼロでゆっくり滑り始め，球の中心と質点を結ぶ線分とy軸となす角度がθの時，質点は球面から離れ，やがて床に落下した。この間，球は動かないと仮定する。以下の問に答えよ。



1. 質点が球面から離れる瞬間は，質点が球面から受ける抗力は0であることを用いて，質点が球面から離れる瞬間の質点の速さvを，gとRを用いて表せ。

v = sqrt(2)*sqrt(g*R)/sqrt(3)

あなたの入力した数式は次のとおりです：

$$\frac{\sqrt{2} \cdot \sqrt{g \cdot R}}{\sqrt{3}}$$

あなたの解答の中で使われている変数は$[g, R]$ です

System demo...

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Key ideas in STACK

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   - Key in my multi-part question design.
   - No “mark this part“ button by design!
3. Quality control: question tests.
   - Key for long term quality assurance.

Let's write a question!

Please use the EAMS site!

`https://eams.ncl.ac.uk/moodle/course/view.php?id=32`

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6. Please contact me if you/your institution would like commercial support.