Welcome to PHY 100
Four Fundamental Forces

Gravitational Force

Electro-Magnetic Force

Weak Force

Strong Force

neutrino interaction induces beta decay

Force which holds nucleus together
Two satellites $A$ and $B$ of the same mass are going around Earth in concentric orbits. The distance of satellite $B$ from Earth’s center is twice that of satellite $A$. What is the acceleration of satellite $A$, $a_A$, towards the earth as compared to satellite $B$, $a_B$?

A. the same acceleration (including if they are both zero).
B. $a_A$ is twice as large as $a_B$
C. $a_B$ is twice as large as $a_A$
D. $a_A$ is four times as large as $a_B$
E. $a_B$ is four times as large as $a_A$
## Exam #1 Review

<table>
<thead>
<tr>
<th>Wrong Responses</th>
<th>PS #1</th>
<th>PS #2</th>
<th>PS #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 60%</td>
<td>16, 45, 47</td>
<td>9, 22, 35, 21, 29, 33, 27</td>
<td>28, 29, 16, 18</td>
</tr>
<tr>
<td>Between 60% and 70%</td>
<td>37, 50, 32, 46, 40</td>
<td>19, 34</td>
<td>7, 14, 26, 15</td>
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</tbody>
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