

What is the coefficient μ ?

A The mass of the largest body

0 ✕

B The gravitational constant

0 ✕

C The standard gravitational parameter

0 ✓

D The acceleration of the smallest object

0 ✕

What is the potential energy of a spacecraft in a gravitational field?

1 $E_{pot} = mgh$ A

0 ✕

2 $E_{pot} = -\mu/r$ B

0 ✓

3 $E_{pot} = \frac{1}{2}v^2$ C

0 ✕

What are the Van Allen belts?

A Special orbits for SATCOM satellites

0 ✕

B equatorial radiation belts

0 ✕

C increase the lifetime of a satellite

0 ✕

D Regions of higher electron and proton densities

0 ✓

What is the value of the solar flux at the top of the atmosphere (in W/m^2)

- | | | | |
|---|------|---|---|
| A | 1368 | 0 | ✓ |
| B | 9114 | 0 | ✗ |
| C | 2.6 | 0 | ✗ |
| D | 1678 | 0 | ✗ |

How does the emitted power changes with temperature?

A $P_e \sim T^4$ A

0 ✓

B $P_e \sim T^2$ B

0 ✕

C $P_e \sim \sqrt{T}$ C

0 ✕

What is controlled by the the absorptivity/emissivity ratio?

A The cross section of an object

0 ✕

B The size of an object

0 ✕

C The lifetime of the object

0 ✕

D The temperature of an object

0 ✓

If you want to extract a lot of thermal energy and not absorb as least energy as possible, you should choose an absorptivity/emissivity ratio that is... and a surface typically...

A as large as possible

0 ✕

B as small as possible

0 ✓

C White

0 ✓

D Black

0 ✕