

## Opening

Credit to Cas from Discord for this calc.

There is the feat where [Puss in Boots survives a beanstalk growing into the sky at high speeds](#). A calculation was done on this before where it got [7.96 megatons for the Kinetic Energy and 56.6 megatons for the Gravitational Potential Energy](#). But Cas from Discord read the novel adaptation of it which gave it a bit of an upgrade.

It was stated to grow at least a thousand feet a second.

Like a volcano, the ground erupted at once, and an enormous beanstalk shot out. It grew so fast, it caught the egg and the cats in its leaves, and carried them up at rocket-ship speed.

Puss looked down. How fast were they going? A thousand feet a second, at least! The earth below was getting smaller. The desert canyons already looked like tiny cracks. And the stalk was getting wider, twisting and writhing as if it were alive. It snapped and creaked as it coiled and bent and stretched, and its leaves rustled like thunder as the wind rushed by.

Which is 305 meters per second.

Now let's recalculate some feats.

So, for the mass. We need to find the size of the plant by finding how far it went.

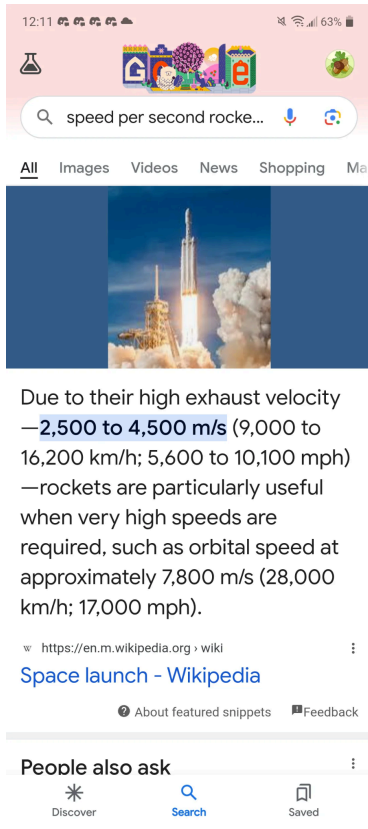
- Speed: 305 meters per second
- Time: 1:51 to 3:03, 1 minute and 12 seconds
- [Size](#): 21.96 kilometers, 21960 meters

[\(\(2.196e6/53.3\)^3\) x \(0.11 kilograms\) = 7.693e12 kilograms](#)

- [KE](#): 3.578e17 joules, 85.52 megatons
- [GPE](#): 1.6567e18 joules, 396 megatons

Pretty good upgrade. But this could be higher because after the thousand feet a second statement it was said to carry them at rocket-ship speed.

From what I could find the average rocket moves at 2500 to 4500 meters per second.



So, I will calculate that with this extra value.

- Speed: 2500-4500 meters per second
- Time: 1:51 to 3:03, 1 minute and 12 seconds
- [Size 1](#): 180 kilometers, 180000 meters
- [Size 2](#): 324 kilometers, 324000 meters

$$\frac{((18e6/53.3)^3) \times (0.11 \text{ kilograms})}{1000} = 4.237e15 \text{ kilograms}$$
$$\frac{((32.4e6/53.3)^3) \times (0.11 \text{ kilograms})}{1000} = 2.471e16 \text{ kilograms}$$

- [KE 1](#): 1.324e22 joules, 3.164 teratons
- [GPE 1](#): 7.479e21 joules, 1.788 teratons
- [KE 2](#): 2.502e23 joules, 59.8 teratons
- [GPE 2](#): 7.851e22 joules, 18.76 teratons

So, I would add to this into the debatable high tier Puss in Boots feats.

## New End

I found this new recalculation of the feat [here](#). This just used Puss's KE which I disagree with but it does have something I can use because it has a Speed that was higher than what I got. So I am recalculating this with that new speed.

- Speed: 110563.584023 meters per second
- Time: 1:51 to 3:03, 1 minute and 12 seconds
- [Size](#): 7960.5780497 kilometers, 7.9605780497e6 meters

[\(\(7.9605780497e8/53.3\)^3\) x \(0.11 kilograms\) = 3.665e20 kilograms](#)

- [KE](#): 2.24e30 joules, 534.4 exatons
- [GPE](#): 2.861e28 joules, 6.838 exatons

This once again would be into the debatable high tier Puss in Boots feats.