

[Skip to main content](#)

r/ThingsYouDintKnow



Search in...



Create



r/ThingsYouDintKnow • 3 mo. ago

TheStocksGuy



Using [W][F] to escape black holes seems easy in math...

In the context of physical principles, the application of 20% or 0.20 can occur in various scenarios, particularly in calculations involving percentages, scaling factors, or efficiency rates. Here are a few key areas where such values may apply:

Force and Work Calculations: If you're calculating work done or energy efficiency, a 20% efficiency rate could be represented as 0.20. For example, if a system converts 20% of the input energy into useful work, you would multiply the total energy by 0.20 to find the useful work output.

Material Properties: In materials science, 20% could represent the strength reduction due to fatigue or the percentage of a material's capacity being used. For instance, if a material can withstand a maximum load of 1000 N, a load applied at 20% would be 200 N, which can be calculated by (1000 N x 0.20).

Statistical Analysis: In experimental physics or engineering, if a set of data indicates that a certain outcome occurs 20% of the time, you would use this percentage in probability calculations or risk assessments.

Concentration Calculations: In chemistry, a solution with a concentration of 20% (or 0.20) indicates that 20 grams of solute are present in 100 grams of solution. This concept is crucial for preparing solutions with specific molarity or concentrations.

These examples illustrate how percentages like 20% or 0.20 can be relevant in various scientific fields, influencing calculations and analyses in mechanics, materials science, and chemistry. For more detailed information, resources like **NIST's** physical constants [25] and educational materials from platforms like Chemistry LibreTexts [26] can provide further insights.

Escaping the pull towards 0: Multiplying 1000 N x 0.20 shows how to navigate tiny openings with equal force. This implies the universe follows mathematical principles that need to be unraveled. Essentially, you're creating new black holes that are drawn upward toward what we perceive as matter.

--

Weight (W) and Force (F) If correctly measured (With my adjustments, gravity has been defined as having a weight of zero.) :

- **Weight (W):** Weight is the force exerted by gravity on an object. It is calculated as the mass of the object multiplied by the acceleration due to gravity (approximately 9.81 m/s² on Earth). The formula is $W = m \cdot g$, where m is mass and g is the acceleration due to gravity. This means that weight changes depending on the gravitational field strength, making it a variable force.
- **Force (F):** Force is any interaction that, when unopposed, will change the motion of an object. It is described by Newton's second law of motion: $F = m \cdot a$, where a is acceleration. Force can be a push or a pull and is measured in Newtons (N). Different types of forces include gravitational force, frictional force, and tension.