

Hit Chance Formula

$$\text{HitChance} = \text{AttackAccuracy} + (\text{MyDexterity} * \text{MyTension}) - (\text{TargetAgility} * \text{TargetTension})$$

$$\text{CriticalChance} = \text{AttackCritRating} + (\text{MyDexterity} / 2)$$

HitChance is a percentage value between 1% and 99%

AttackAccuracy is an integer between 1 and 100

The stats **Dexterity** and **Agility** are integers between 25 and 50. Stats can be temporarily raised and lowered by a maximum of 10.

- Therefore, **MyDexterity** and **TargetAgility** can potentially have an integer value between 15 and 60.

While performing an attack, two random numbers between 0% and 100% are generated.

- If at least one of the two numbers are equal to or less than **HitChance**, the attack successfully hits the target.

- If both numbers are equal to or less than **HitChance**, then the damage dealt by the attack receives a 10% bonus.

There is also a chance to score critical hits.

- If the attack hits, a single random number between 0% and 100% is generated.

- If the number is equal to or less than **CriticalChance**, the damage dealt by the attack receives a 100% bonus.

Damage Formula

$$\text{BaseDamage} = \sqrt{(\text{MyStrength} / \text{TargetDefence}) * (\text{AttackPower} * \text{MyLevel} / 2)}$$

BaseDamage can be increased and decreased by modifiers and bonuses, which are always a percentage value

- After all modifiers have been applied, the **TotalDamage** is returned by the damage function.