Hit successful explanation

1) Introduction

This is an explanation of the odds of hitting/getting hit. It is also used to calculate every hit in a multi hit attack. **The only outlier is Galacticmon (Phase 3), if you're hitting him, your digimon have a hard coded 84/127 (66%) to hit regardless of move.** There are also different formulas for physical and magic attacks. Physical follows 2 formulas, one for when your digimon is attacking and one for when the enemy digimon is attacking.

2) Parameters

r Є {0, 1, ..., 127}

ar -> additonal accuracy

additional accuracy is the sum of your weapons accuracy and accessory accuracy

Accessory	Additional Accuracy
Glasses	10
Goggles	20

ae -> additional evasiveness

additional evasiveness is the sum of your armor evasiveness and accessory evasiveness

Accessory	Additional Evasiveness
Dance Feather	10
Dance Wing	20

sdp -> speed difference when player attacking

sdp = AttackerSpeed + ar - DefenderSpeed

sde -> speed difference when enemy attacking

sde = AttackerSpeed - DefenderSpeed - ae

ld -> level difference

ld = AttackerLevel - DefenderLevel

wd -> widsom difference

wd = AttackerWisdom - DefenderWisdom

acr -> additional crit rate

additional crit rate is crit rate gained from weapons (2^{nd} slot has priority) or if no weapon has crit rate it uses the accessories (Search Crest)

Item	Additional Crit rate
Saber Fang	64
Shuriken	32
Search Crest	32

3) Formulas addRange, physical

a) Player, no Move Hit Effect

addRange = MoveAccuracy * (sdp / 8) + ld - acr

b) Player, has Move Hit Effect

addRange = MoveAccuracy * (sdp / 8) + ld

c) Enemy

addRange = MoveAccuracy * (sde / 8) + ld

4) Formula addRange, magic

addRange = MoveAccuracy * (wd / 8) + ld

5) Hit successful

range = MoveAccuracy + (addRange / 128)
r < range -> Hit successful
r >= -> Hit failed