

New Resist & Damage

Scot MoonShade Nate ShadowBringer
@ShadowScott#1234 @PhantomNate#0001

Juan FireCaster Wolf Stalker
@jjeastside#7289 @Lucyfer#5969

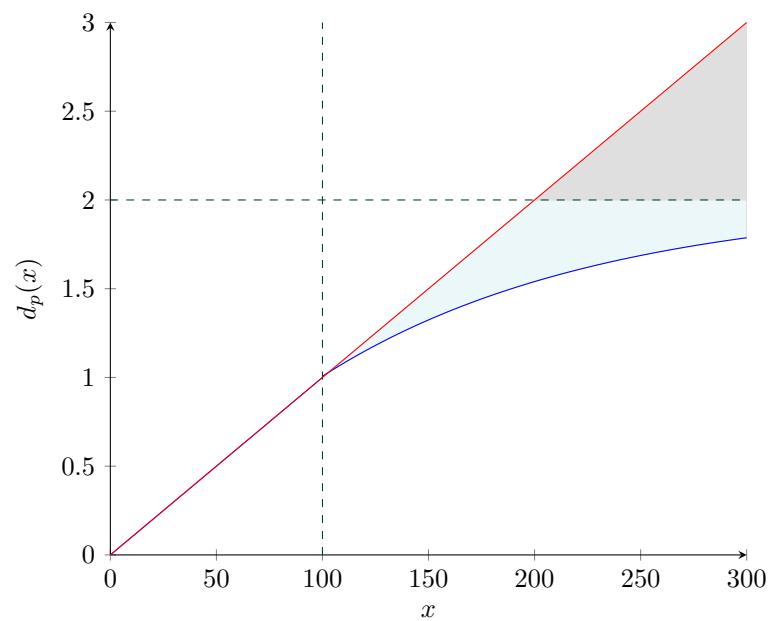
Daniel FrostHeart
@Mayonnaiseinator#9263

16 April 2021

Damage

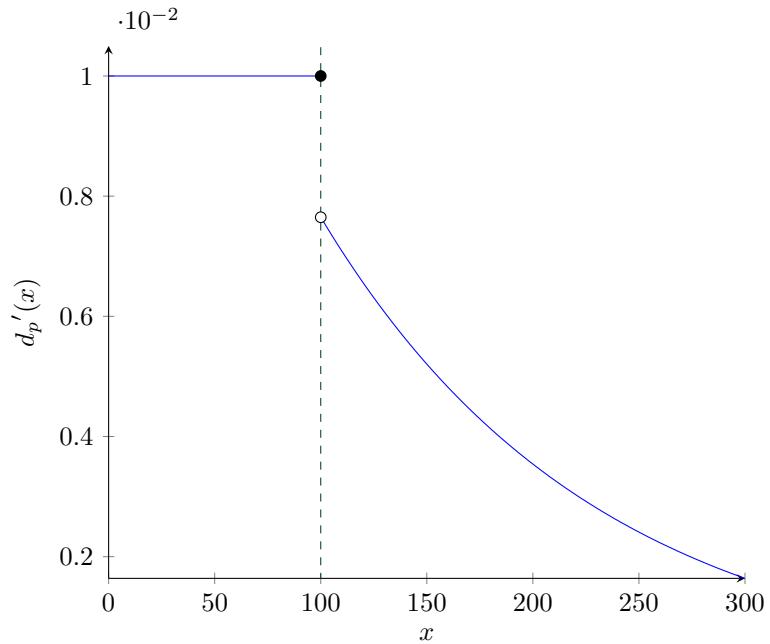
PvP

Raw



$$d_p(x) = \begin{cases} x; & 0 \leq x \leq 100 \\ 2 - \frac{2}{e^{a_1x-b_1}}; & 100 < x \end{cases}$$

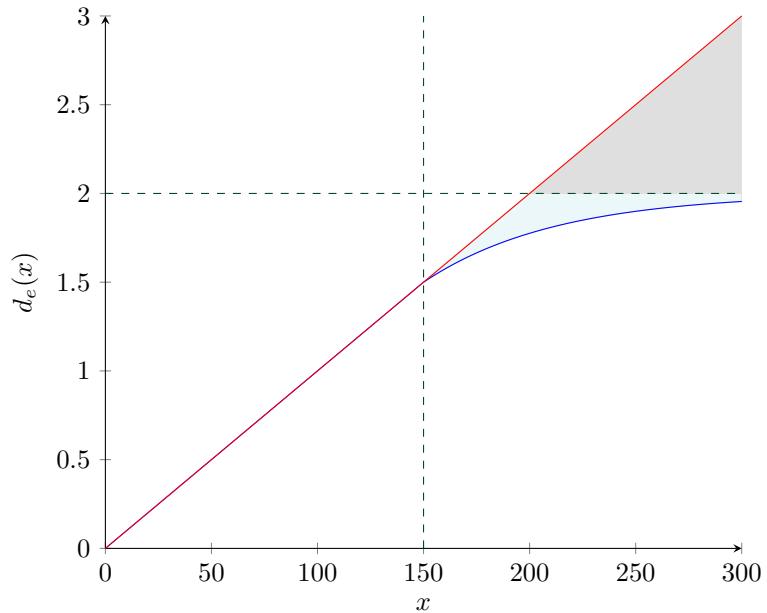
Rate of Change (Δ)



$$d_p'(x) = \begin{cases} 0.01; & 0 \leq x \leq 100 \\ \alpha_1 \cdot e^{\beta_1 x + \gamma_1}; & 100 < x \end{cases}$$

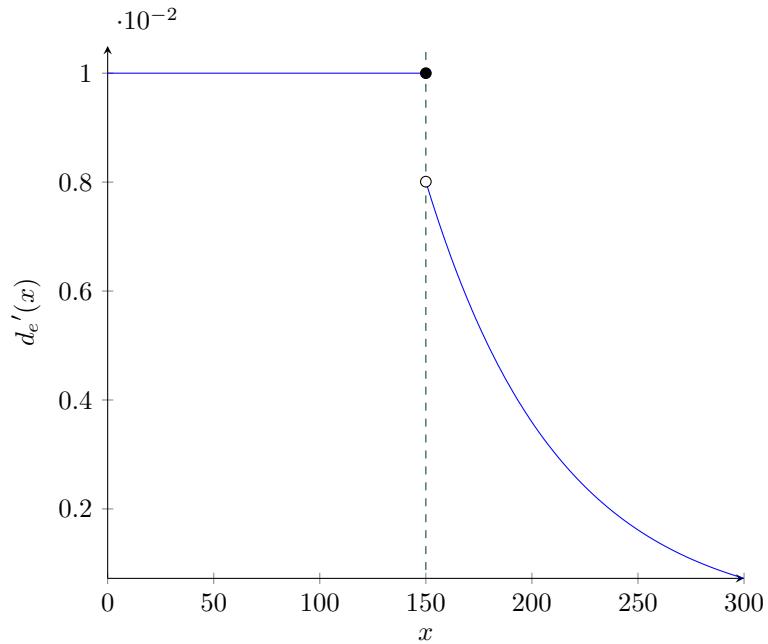
PvE

Raw



$$d_e(x) = \begin{cases} x; & 0 \leq x \leq 150 \\ 2 - \frac{2}{e^{a_2 x - b_2}}; & 150 < x \end{cases}$$

Rate of Change (Δ)

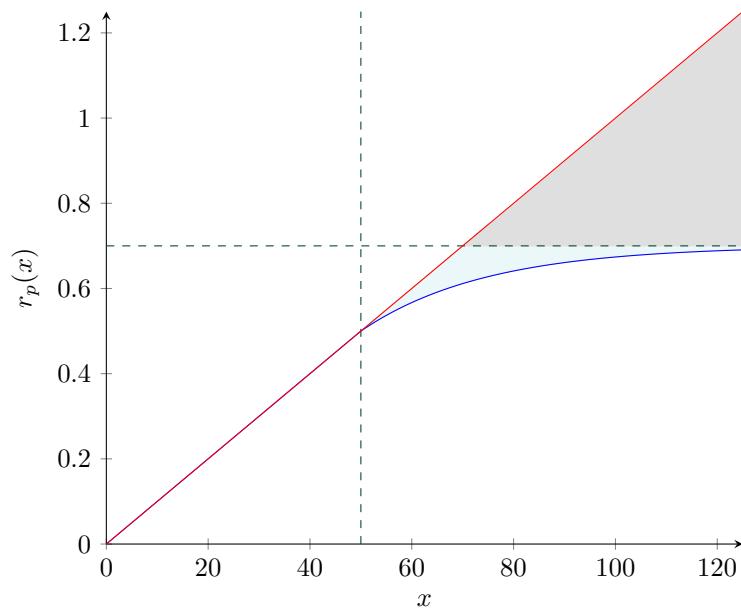


$$d_e'(x) = \begin{cases} 0.01; & 0 \leq x \leq 150 \\ \alpha_2 \cdot e^{\beta_2 x + \gamma_2}; & 150 < x \end{cases}$$

Resist

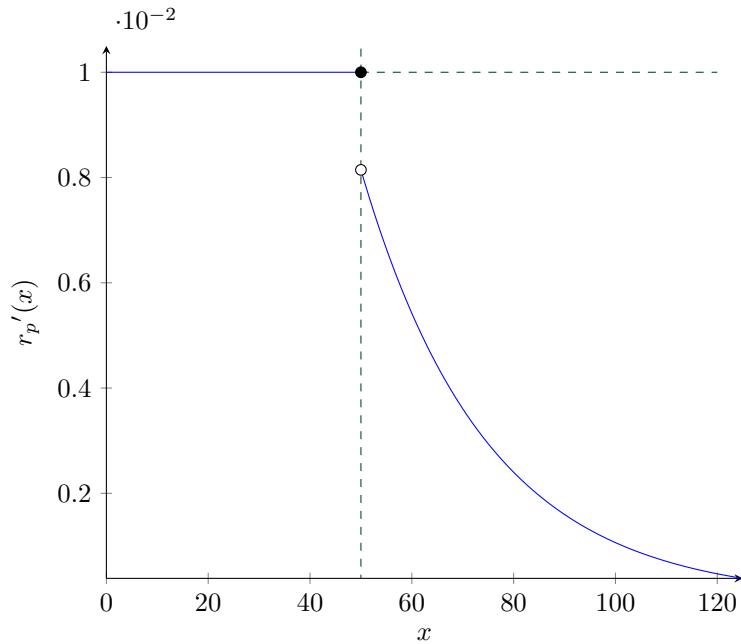
PvP

Raw



$$r_p(x) = \begin{cases} x; & 0 \leq x \leq 50 \\ 0.7 - \frac{0.7}{e^{a_3x-b_3}}; & 50 < x \end{cases}$$

Rate of Change (Δ)



$$r_p'(x) = \begin{cases} 0.01; & 0 \leq x \leq 50 \\ \alpha_3 \cdot e^{\beta_3 x + \gamma_3}; & 50 < x \end{cases}$$

Definition of constants

constant	value
a_1	0.00770162
b_1	0.0701635
α_1	0.01540326
β_1	-0.00770163
γ_1	0.0701635
a_2	0.0160168
b_2	-1.01623692
α_2	0.0320336
β_2	-0.0160168
γ_2	1.01623692
a_3	0.04072764
b_3	-0.7836190
α_3	0.02850934
β_3	-0.04072764
γ_3	0.78361903

Limit Definitions

The functions follow the following trends, with *absolute* limits.

$$\lim_{x \rightarrow \infty} d(x) = 2$$

$$\lim_{x \rightarrow \infty} r_p(x) = 0.7$$