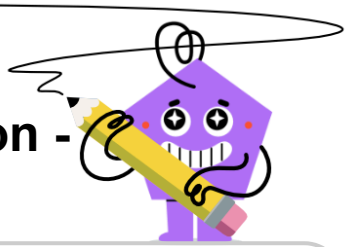
Name

Exponential Function Solution Equation - Decay (Discrete, Mis-matched Time Units) Equation to Rate



1 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (daily disbursements)?

$$265 = 300 \cdot (1 - r)^{(2 \cdot 365)}$$

A	$r = -(\frac{265}{300})^{\frac{1}{2 \cdot 365}} - 1$	B	$r = -(\frac{265}{300})^{\frac{2 \cdot 365}{2}} - 1$
C	$r = +(\frac{265}{300})^{\frac{\frac{1}{2}}{365}} + 1$		

2 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$0 = 700 \cdot (1 - r)^{(\frac{96}{12})}$$

A	$r = +(\frac{0}{700})^{\frac{1}{96 \cdot 12}} + 1$	B	$r = -(\frac{0}{700})^{\frac{\frac{96}{12}}{2}} - 1$
C	$r = -(\frac{0}{700})^{\frac{1}{\frac{96}{12}}} - 1$		

3 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$126 = 800 \cdot (1 - r)^{(\frac{36}{12})}$$

A	$r = +(\frac{126}{800})^{\frac{1}{36 \cdot 12}} + 1$	B	$r = -(\frac{126}{800})^{\frac{1}{\frac{36}{12}}} - 1$
C	$r = -(\frac{126}{800})^{\frac{\frac{36}{12}}{2}} - 1$		

4 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (weekly disbursements)?

$$126 = 700 \cdot (1 - r)^{(\frac{42}{7})}$$

A	$r = -(\frac{126}{700})^{\frac{1}{\frac{42}{7}}} - 1$	B	$r = +(\frac{126}{700})^{\frac{1}{42 \cdot 7}} + 1$
C	$r = -(\frac{126}{700})^{\frac{\frac{42}{7}}{2}} - 1$		

5 Rearrange this equation to solve for the rate given this model of a decline of a toxin concentration (weekly dialysis)?

$$385 = 900 \cdot (1 - r)^{(\frac{42}{7})}$$

A	$r = -(\frac{385}{900})^{\frac{\frac{42}{7}}{2}} - 1$	B	$r = -(\frac{385}{900})^{\frac{1}{\frac{42}{7}}} - 1$
C	$r = +(\frac{385}{900})^{\frac{1}{42 \cdot 7}} + 1$		

6 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$0 = 300 \cdot (1 - r)^{(\frac{72}{12})}$$

A	$r = -(\frac{0}{300})^{\frac{1}{\frac{72}{12}}} - 1$	B	$r = +(\frac{0}{300})^{\frac{1}{72 \cdot 12}} + 1$
C	$r = -(\frac{0}{300})^{\frac{\frac{72}{12}}{2}} - 1$		

7 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (daily disbursements)?

$$132 = 200 \cdot (1 - r)^{(8 \cdot 7)}$$

A	$r = -(\frac{132}{200})^{\frac{1}{8 \cdot 7}} - 1$	B	$r = -(\frac{132}{200})^{\frac{8 \cdot 7}{2}} - 1$

8 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$89 = 800 \cdot (1 - r)^{(\frac{72}{12})}$$

A	$r = -(\frac{89}{800})^{\frac{1}{\frac{72}{12}}} - 1$	B	$r = +(\frac{89}{800})^{\frac{1}{72 \cdot 12}} + 1$
C	$r = -(\frac{89}{800})^{\frac{\frac{72}{12}}{2}} - 1$		