



Exponential Function Solution Equation - Decay (Discrete) Equation to Starting

Value

1 Rearrange this equation to solve for the starting population given this model of a decline of a bird population (yearly breeding cycle)?

$$737 = P_0 \cdot (1 - 0.02)^{(4)}$$

A $P_0 = 737 \cdot (1 - 0.02)^4$

B $P_0 = \frac{737}{(1 + 0.02)^4}$

C $P_0 = \frac{737}{(1 - 0.02)^4}$

2 Rearrange this equation to solve for the starting population given this model of a decline of a bird population (yearly breeding cycle)?

$$706 = P_0 \cdot (1 - 0.06)^{(2)}$$

A $P_0 = \frac{706}{(1 - 0.06)^2}$

B $P_0 = 706 \cdot (1 - 0.06)^2$

C $P_0 = \frac{706}{(1 + 0.06)^2}$

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

$$304 = P_0 \cdot (1 - 0.03)^{(9)}$$

A $P_0 = \frac{304}{(1 - 0.03)^9}$

B $P_0 = \frac{304}{(1 + 0.03)^9}$

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

$$553 = C_0 \cdot (1 - 0.02)^{(4)}$$

A $C_0 = 553 \cdot (1 - 0.02)^4$

B $C_0 = \frac{553}{(1 - 0.02)^4}$

C $C_0 = \frac{553}{(1 + 0.02)^4}$

5 Rearrange this equation to solve for the starting population given this model of a decline of a whale population (yearly breeding cycle)?

$$250 = P_0 \cdot (1 - 0.02)^{(9)}$$

A $P_0 = 250 \cdot (1 - 0.02)^9$

B $P_0 = \frac{250}{(1 + 0.02)^9}$

C $P_0 = \frac{250}{(1 - 0.02)^9}$

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

$$397 = C_0 \cdot (1 - 0.09)^{(6)}$$

A $C_0 = \frac{397}{(1 - 0.09)^6}$

B $C_0 = 397 \cdot (1 - 0.09)^6$

C $C_0 = \frac{397}{(1 + 0.09)^6}$

7 Rearrange this equation to solve for the starting population given this model of a decline of a bird population (yearly breeding cycle)?

$$424 = P_0 \cdot (1 - 0.08)^{(6)}$$

A $P_0 = \frac{424}{(1 - 0.08)^6}$

B $P_0 = \frac{424}{(1 + 0.08)^6}$

8 Rearrange this equation to solve for the starting population given this model of a decline of a bird population (yearly breeding cycle)?

$$489 = P_0 \cdot (1 - 0.04)^{(5)}$$

A $P_0 = 489 \cdot (1 - 0.04)^5$

B $P_0 = \frac{489}{(1 - 0.04)^5}$

C $P_0 = \frac{489}{(1 + 0.04)^5}$