



## Exponential Function Decay (Discrete) - Meaning to Term

- 1 In this model of decline of a whale population (yearly breeding cycle), which term represents the starting population?

$$P = P_0 \cdot (1 - r)^{(t)}$$

starting population =?

A	B	C	D
$r$	$P$	$P_0$	$t$

- 2 In this model of balance of a charitable endowment (yearly disbursements), which term represents the final cash?

$$P = P_0 \cdot (1 - r)^{(t)}$$

final cash =?

A	B	C
$P$	$t$	$r$

- 3 In this model of decline of a bird population (yearly breeding cycle), which term represents the rate?

$$P = P_0 \cdot (1 - r)^{(t)}$$

rate =?

A	B	C	D
$r$	$P$	$P_0$	$t$

- 4 In this model of decline of a bird population (yearly breeding cycle), which term represents the time?

$$P = P_0 \cdot (1 - r)^{(t)}$$

time =?

A	B	C
$t$	$P_0$	$P$

- 5 In this model of decline of a whale population (yearly breeding cycle), which term represents the final population?

$$P = P_0 \cdot (1 - r)^{(t)}$$

final population =?

A	B	C
$r$	$t$	$P$

- 6 In this model of decline of a toxin concentration (monthly dialysis), which term represents the starting concentration?

$$C = C_0 \cdot (1 - r)^{(t)}$$

starting concentration =?

A	B	C	D
$C$	$r$	$C_0$	$t$

- 7 In this model of balance of a charitable endowment (weekly disbursements), which term represents the starting cash?

$$P = P_0 \cdot (1 - r)^{(t)}$$

starting cash =?

A	B	C	D
$t$	$P_0$	$r$	$P$

- 8 In this model of decline of a toxin concentration (hourly dialysis), which term represents the time?

$$C = C_0 \cdot (1 - r)^{(t)}$$

time =?

A	B	C
$C$	$C_0$	$t$