Name

Exponential Function Decay (Discrete) - Equation and Scenario to Specific Value

1 What is the final concentration in this equation for a decline of a toxin concentration (daily dialysis)?

$$220 = 300 \cdot (1 - 0.06)^{(5)}$$

A	$C = 6$	B	$C = 220$
C	$C = 5$		

2 What is the time in this equation for a decline of a bird population (yearly breeding cycle)?

$$554 = 800 \cdot (1 - 0.04)^{(9)}$$

A	$t = 800$	B	$t = 9$	C	$t = 554$

3 What is the final population in this equation for a decline of a whale population (yearly breeding cycle)?

$$796 = 900 \cdot (1 - 0.04)^{(3)}$$

A	$P = 900$	B	$P = 796$

4 What is the final population in this equation for a decline of a whale population (yearly breeding cycle)?

$$629 = 900 \cdot (1 - 0.05)^{(7)}$$

A	$P = 7$	B	$P = 629$
C	$P = 5$		

5 What is the time in this equation for a decline of a whale population (yearly breeding cycle)?

$$508 = 600 \cdot (1 - 0.08)^{(2)}$$

A	$t = 2$	B	$t = 600$	C	$t = 507$

6 What is the final concentration in this equation for a decline of a toxin concentration (weekly dialysis)?

$$722 = 800 \cdot (1 - 0.05)^{(2)}$$

A	$C = 2$	B	$C = 800$
C	$C = 722$		

7 What is the rate in this equation for a decline of a whale population (yearly breeding cycle)?

$$340 = 400 \cdot (1 - 0.02)^{(8)}$$

A	$r = 340\%$	B	$r = 400\%$
C	$r = 2\%$		

8 What is the starting cash in this equation for a balance of a charitable endowment (daily disbursements)?

$$565 = 600 \cdot (1 - 0.02)^{(3)}$$

A	$P_0 = 3$	B	$P_0 = 600$
C	$P_0 = 2$	D	$P_0 = 564$