Exponential & Logarithmic Models · 1

$500 is invested at 7% compounded continuously ($A = Pe^{rt}$). How much is in the account after 11 years? (nearest cent)

Exponential & Logarithmic Models · 2

A population grows continuously at 7% per year ($P = P_0e^{rt}$). How many years does it take to double? Round to the nearest tenth.

Exponential & Logarithmic Models · 3

$5000 is invested at 7% interest compounded annually. How much is in the account after 3 years? (nearest cent)

Exponential & Logarithmic Models · 4

Solve for x: $5 \cdot 2^x = 10$

Exponential & Logarithmic Models · 5

Evaluate $\log_4(28) - \log_4(7)$.

Exponential & Logarithmic Models · 6

Solve for x: $\ln(x) = \ln(5) + \ln(4)$

Exponential & Logarithmic Models · 7

$2500 is invested at 2% interest compounded annually. How much is in the account after 8 years? (nearest cent)

Exponential & Logarithmic Models · 8

Solve for x: $3 \cdot 2^x = 192$

Exponential & Logarithmic Models · 2

ANSWER

9.9

Exponential & Logarithmic Models · 1

ANSWER

1079.88

Exponential & Logarithmic Models · 4

ANSWER

x = 1

Exponential & Logarithmic Models · 3

ANSWER

6125.22

Exponential & Logarithmic Models · 6

ANSWER

x = 20

Exponential & Logarithmic Models · 5

ANSWER

1

Exponential & Logarithmic Models · 8

ANSWER

x = 6

Exponential & Logarithmic Models · 7

ANSWER

2929.15

Exponential & Logarithmic Models · 9

$3000 is invested at 4% compounded continuously ($A = Pe^{rt}$). How much is in the account after 9 years? (nearest cent)

Exponential & Logarithmic Models · 10

A population grows continuously at 5% per year ($P = P_0e^{rt}$). How many years does it take to double? Round to the nearest tenth.

Exponential & Logarithmic Models · 11

$5000 is invested at 3% interest compounded annually. How much is in the account after 3 years? (nearest cent)

Exponential & Logarithmic Models · 12

Solve for x: $6 \cdot 2^x = 96$

Exponential & Logarithmic Models · 13

Evaluate $\log_5(20) - \log_5(4)$.

Exponential & Logarithmic Models · 14

Solve for x: $\ln(x) = \ln(5) + \ln(5)$

Exponential & Logarithmic Models · 15

Solve for x: $3 \cdot 2^x = 48$

Exponential & Logarithmic Models · 16

Evaluate $\log_5(100) - \log_5(4)$.

Exponential & Logarithmic Models · 10

ANSWER

13.9

Exponential & Logarithmic Models · 9

ANSWER

4299.99

Exponential & Logarithmic Models · 12

ANSWER

x = 4

Exponential & Logarithmic Models · 11

ANSWER

5463.64

Exponential & Logarithmic Models · 14

ANSWER

x = 25

Exponential & Logarithmic Models · 13

ANSWER

1

Exponential & Logarithmic Models · 16

ANSWER

2

Exponential & Logarithmic Models · 15

ANSWER

x = 4

Exponential & Logarithmic Models · 17

$5000 is invested at 6% compounded continuously ($A = Pe^{rt}$). How much is in the account after 11 years? (nearest cent)

Exponential & Logarithmic Models · 18

A population grows continuously at 10% per year ($P = P_0e^{rt}$). How many years does it take to double? Round to the nearest tenth.

Exponential & Logarithmic Models · 19

$800 is invested at 2% interest compounded annually. How much is in the account after 8 years? (nearest cent)

Exponential & Logarithmic Models · 20

Solve for x: $4 \cdot 3^x = 108$

Exponential & Logarithmic Models · 21

Evaluate $\log_5(150) - \log_5(6)$.

Exponential & Logarithmic Models · 22

Solve for x: $\ln(x) = \ln(4) + \ln(4)$

Exponential & Logarithmic Models · 23

Evaluate $\log_{10}(300) - \log_{10}(3)$.

Exponential & Logarithmic Models · 24

Solve for x: $\ln(x) = \ln(2) + \ln(2)$

Exponential & Logarithmic Models · 18

ANSWER

6.9

Exponential & Logarithmic Models · 17

ANSWER

9673.96

Exponential & Logarithmic Models · 20

ANSWER

x = 3

Exponential & Logarithmic Models · 19

ANSWER

937.33

Exponential & Logarithmic Models · 22

ANSWER

x = 16

Exponential & Logarithmic Models · 21

ANSWER

2

Exponential & Logarithmic Models · 24

ANSWER

x = 4

Exponential & Logarithmic Models · 23

ANSWER

2