Evaluate $e^{\ln 2}$.

Evaluate $\log_5(50) + \log_5(5) - \log_5(2)$.

A bacteria culture starts with 150 cells and doubles every 4 hours. How many cells are there after 12 hours?

A sample of 14 mg of a substance has a half-life of 2 days. How many milligrams remain after 2 days?

Solve for x: $\log_5(x - 1) = 3$

A bacteria culture starts with 100 cells and doubles every 2 hours. How many cells are there after 6 hours?

A sample of 48 mg of a substance has a half-life of 7 days. How many milligrams remain after 21 days?

Solve for x: $\log_3(x - 4) = 3$

Exponential & Logarithmic Models · 2

ANSWER

3

Exponential & Logarithmic Models · 1

ANSWER

2

Exponential & Logarithmic Models · 4

ANSWER

7

Exponential & Logarithmic Models · 3

ANSWER

1200

Exponential & Logarithmic Models · 6

ANSWER

800

Exponential & Logarithmic Models · 5

ANSWER

x = 126

Exponential & Logarithmic Models · 8

ANSWER

x = 31

Exponential & Logarithmic Models · 7

ANSWER

6

Evaluate $\ln(e^5)$.

Evaluate $\log_2(6) + \log_2(16) - \log_2(3)$.

A bacteria culture starts with 500 cells and doubles every 6 hours. How many cells are there after 24 hours?

A sample of 40 mg of a substance has a half-life of 3 days. How many milligrams remain after 9 days?

Solve for x: $\log_3(x + 1) = 1$

Evaluate $\log_2(6) + \log_2(8) - \log_2(3)$.

A sample of 192 mg of a substance has a half-life of 6 days. How many milligrams remain after 18 days?

A sample of 100 mg of a substance has a half-life of 5 days. How many milligrams remain after 10 days?

Exponential & Logarithmic Models · 10

ANSWER

5

Exponential & Logarithmic Models · 9

ANSWER

5

Exponential & Logarithmic Models · 12

ANSWER

5

Exponential & Logarithmic Models · 11

ANSWER

8000

Exponential & Logarithmic Models · 14

ANSWER

4

Exponential & Logarithmic Models · 13

ANSWER

x = 2

Exponential & Logarithmic Models · 16

ANSWER

25

Exponential & Logarithmic Models · 15

ANSWER

24

Exponential & Logarithmic Models · 17

Evaluate $\log_2(12) + \log_2(8) - \log_2(3)$.

Exponential & Logarithmic Models · 18

Evaluate $\log_4(768) - \log_4(3)$.

Exponential & Logarithmic Models · 19

A bacteria culture starts with 500 cells and doubles every 6 hours. How many cells are there after 18 hours?

Exponential & Logarithmic Models · 20

A sample of 68 mg of a substance has a half-life of 2 days. How many milligrams remain after 4 days?

Exponential & Logarithmic Models · 21

Solve for x: $2 \cdot 2^x = 128$

Exponential & Logarithmic Models · 22

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

Exponential & Logarithmic Models · 23

Solve for x: $7 \cdot 2^x = 224$

Exponential & Logarithmic Models · 24

A bacteria culture starts with 100 cells and doubles every 4 hours. How many cells are there after 20 hours?

Exponential & Logarithmic Models · 18

ANSWER

4

Exponential & Logarithmic Models · 17

ANSWER

5

Exponential & Logarithmic Models · 20

ANSWER

17

Exponential & Logarithmic Models · 19

ANSWER

4000

Exponential & Logarithmic Models · 22

ANSWER

6149.37

Exponential & Logarithmic Models · 21

ANSWER

x = 6

Exponential & Logarithmic Models · 24

ANSWER

3200

Exponential & Logarithmic Models · 23

ANSWER

x = 5