Task card 1 Exponential & Logarithmic Models

Evaluate $e^{\ln 2}$.

Task card 2 Exponential & Logarithmic Models

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

Task card 3 Exponential & Logarithmic Models

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

Task card 4 Exponential & Logarithmic Models

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

Task card 5 Exponential & Logarithmic Models

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

Task card 6 Exponential & Logarithmic Models

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

Task card 7 Exponential & Logarithmic Models

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

Task card 8 Exponential & Logarithmic Models

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

Task card 9 Exponential & Logarithmic Models

Evaluate $\ln(e^5)$.

Task card 10 Exponential & Logarithmic Models

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

Task card 11 Exponential & Logarithmic Models

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

Task card 12 Exponential & Logarithmic Models

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

Task card 13 Exponential & Logarithmic Models

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

Task card 14 Exponential & Logarithmic Models

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

Task card 15 Exponential & Logarithmic Models

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

Task card 16 Exponential & Logarithmic Models

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

Task card 17 Exponential & Logarithmic Models

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

Task card 18 Exponential & Logarithmic Models

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

Task card 19 Exponential & Logarithmic Models

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

Task card 20 Exponential & Logarithmic Models

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

Task card 21 Exponential & Logarithmic Models

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

Task card 22 Exponential & Logarithmic Models

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

Task card 23 Exponential & Logarithmic Models

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

Task card 24 Exponential & Logarithmic Models

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

Exponential & Logarithmic Models Task Cards

Recording sheet · Grade 12 · Solve each problem. Round money to the nearest cent and other decimals as the problem says.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Exponential & Logarithmic Models Task Cards: Answer Key

Grade 12 · Easy

The answers online

1. 2	**2.** 3	**3.** 1200
4. 7	**5.** x = 126	**6.** 800
7. 6	**8.** x = 31	**9.** 5
10. 5	**11.** 8000	**12.** 5
13. x = 2	**14.** 4	**15.** 24
16. 25	**17.** 5	**18.** 4
19. 4000	**20.** 17	**21.** x = 6
22. 6149.37	**23.** x = 5	**24.** 3200