Task card 1 Exponential & Logarithmic Models

Evaluate $\log_2(24) + \log_2(4) - \log_2(3)$.

Task card 2 Exponential & Logarithmic Models

Evaluate $\log_4(384) - \log_4(6)$.

Task card 3 Exponential & Logarithmic Models

A bacteria culture starts with 400 cells and doubles every 6 hours. How many cells are there after 24 hours?

Task card 4 Exponential & Logarithmic Models

A sample of 80 mg of a substance has a half-life of 9 days. How many milligrams remain after 18 days?

Task card 5 Exponential & Logarithmic Models

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

Task card 6 Exponential & Logarithmic Models

$1000 is invested at 8% interest compounded annually. How much is in the account after 10 years? (nearest cent)

Task card 7 Exponential & Logarithmic Models

Evaluate $\log_2(12) + \log_2(16) - \log_2(3)$.

Task card 8 Exponential & Logarithmic Models

A sample of 80 mg of a substance has a half-life of 7 days. How many milligrams remain after 21 days?

Task card 9 Exponential & Logarithmic Models

Evaluate $\log_2(56) - \log_2(7)$.

Task card 10 Exponential & Logarithmic Models

Solve for x: $7 \cdot 2^x = 448$

Task card 11 Exponential & Logarithmic Models

$1200 is invested at 8% interest compounded annually. How much is in the account after 3 years? (nearest cent)

Task card 12 Exponential & Logarithmic Models

$2000 is invested at 4% compounded continuously ($A = Pe^{rt}$). How much is in the account after 11 years? (nearest cent)

Task card 13 Exponential & Logarithmic Models

A sample of 304 mg of a substance has a half-life of 10 days. How many milligrams remain after 40 days?

Task card 14 Exponential & Logarithmic Models

Solve for x: $\log_3(x - 1) = 3$

Task card 15 Exponential & Logarithmic Models

A sample of 56 mg of a substance has a half-life of 10 days. How many milligrams remain after 20 days?

Task card 16 Exponential & Logarithmic Models

Evaluate $\log_2(96) - \log_2(6)$.

Task card 17 Exponential & Logarithmic Models

Evaluate $\log_3(81) - \log_3(3)$.

Task card 18 Exponential & Logarithmic Models

Solve for x: $2 \cdot 2^x = 8$

Task card 19 Exponential & Logarithmic Models

$1200 is invested at 6% interest compounded annually. How much is in the account after 2 years? (nearest cent)

Task card 20 Exponential & Logarithmic Models

$1000 is invested at 4% compounded continuously ($A = Pe^{rt}$). How much is in the account after 6 years? (nearest cent)

Task card 21 Exponential & Logarithmic Models

A sample of 8 mg of a substance has a half-life of 2 days. How many milligrams remain after 2 days?

Task card 22 Exponential & Logarithmic Models

Solve for x: $\log_3(x + 4) = 1$

Task card 23 Exponential & Logarithmic Models

Evaluate $\log_4(256) - \log_4(4)$.

Task card 24 Exponential & Logarithmic Models

Solve for x: $7 \cdot 2^x = 14$

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

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The answers online

1. 5	**2.** 3	**3.** 6400
4. 20	**5.** x = 1	**6.** 2158.92
7. 6	**8.** 10	**9.** 3
10. x = 6	**11.** 1511.65	**12.** 3105.41
13. 19	**14.** x = 28	**15.** 14
16. 4	**17.** 3	**18.** x = 2
19. 1348.32	**20.** 1271.25	**21.** 4
22. x = -1	**23.** 3	**24.** x = 1