Task card 1 Exponential & Logarithmic Models

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

Task card 2 Exponential & Logarithmic Models

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.

Task card 3 Exponential & Logarithmic Models

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

Task card 4 Exponential & Logarithmic Models

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

Task card 5 Exponential & Logarithmic Models

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

Task card 6 Exponential & Logarithmic Models

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

Task card 7 Exponential & Logarithmic Models

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

Task card 8 Exponential & Logarithmic Models

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

Task card 9 Exponential & Logarithmic Models

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

Task card 10 Exponential & Logarithmic Models

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.

Task card 11 Exponential & Logarithmic Models

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

Task card 12 Exponential & Logarithmic Models

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

Task card 13 Exponential & Logarithmic Models

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

Task card 14 Exponential & Logarithmic Models

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

Task card 15 Exponential & Logarithmic Models

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

Task card 16 Exponential & Logarithmic Models

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

Task card 17 Exponential & Logarithmic Models

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

Task card 18 Exponential & Logarithmic Models

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.

Task card 19 Exponential & Logarithmic Models

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

Task card 20 Exponential & Logarithmic Models

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

Task card 21 Exponential & Logarithmic Models

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

Task card 22 Exponential & Logarithmic Models

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

Task card 23 Exponential & Logarithmic Models

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

Task card 24 Exponential & Logarithmic Models

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

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 · Hard

The answers online

1. 1079.88	**2.** 9.9	**3.** 6125.22
4. x = 1	**5.** 1	**6.** x = 20
7. 2929.15	**8.** x = 6	**9.** 4299.99
10. 13.9	**11.** 5463.64	**12.** x = 4
13. 1	**14.** x = 25	**15.** x = 4
16. 2	**17.** 9673.96	**18.** 6.9
19. 937.33	**20.** x = 3	**21.** 2
22. x = 16	**23.** 2	**24.** x = 4