Task card 1 Exponential Functions: Growth & De...

A car costs $35000. Its value decreases by 18% each year. What is its value after 9 years, in dollars?

Task card 2 Exponential Functions: Growth & De...

The population of a town is modeled by $y = 3000(0.71)^t$, where t is in years. By what percent does it decrease each year?

Task card 3 Exponential Functions: Growth & De...

A town has 5300 people. Its population grows by 3% each year. What will the population be after 9 years?

Task card 4 Exponential Functions: Growth & De...

A town has 7600 people. Its population grows by 2% each year. What will the population be after 6 years?

Task card 5 Exponential Functions: Growth & De...

The value of a car is modeled by $y = 8100(1.02)^t$, where t is in years. By what percent does it increase each year?

Task card 6 Exponential Functions: Growth & De...

A town has 8000 people. Its population grows by 2% each year. What will the population be after 5 years?

Task card 7 Exponential Functions: Growth & De...

A car costs $33000. Its value decreases by 13% each year. What is its value after 7 years, in dollars?

Task card 8 Exponential Functions: Growth & De...

The number of fish in a lake is modeled by $y = 5100(0.90)^t$, where t is in years. By what percent does it decrease each year?

Task card 9 Exponential Functions: Growth & De...

A town has 3500 people. Its population grows by 3% each year. What will the population be after 8 years?

Task card 10 Exponential Functions: Growth & De...

A town has 2400 people. Its population grows by 7% each year. What will the population be after 6 years?

Task card 11 Exponential Functions: Growth & De...

The value of an investment is modeled by $y = 200(1.28)^t$, where t is in years. By what percent does it increase each year?

Task card 12 Exponential Functions: Growth & De...

A car costs $38000. Its value decreases by 9% each year. What is its value after 3 years, in dollars?

Task card 13 Exponential Functions: Growth & De...

A car costs $24000. Its value decreases by 21% each year. What is its value after 8 years, in dollars?

Task card 14 Exponential Functions: Growth & De...

The population of a town is modeled by $y = 7100(0.70)^t$, where t is in years. By what percent does it decrease each year?

Task card 15 Exponential Functions: Growth & De...

A town has 4900 people. Its population grows by 3% each year. What will the population be after 3 years?

Task card 16 Exponential Functions: Growth & De...

A town has 5700 people. Its population grows by 6% each year. What will the population be after 7 years?

Task card 17 Exponential Functions: Growth & De...

The number of fish in a lake is modeled by $y = 3800(1.23)^t$, where t is in years. By what percent does it increase each year?

Task card 18 Exponential Functions: Growth & De...

A town has 5700 people. Its population grows by 2% each year. What will the population be after 6 years?

Task card 19 Exponential Functions: Growth & De...

A town has 4400 people. Its population grows by 3% each year. What will the population be after 5 years?

Task card 20 Exponential Functions: Growth & De...

The value of a car is modeled by $y = 1100(1.31)^t$, where t is in years. By what percent does it increase each year?

Task card 21 Exponential Functions: Growth & De...

A town has 2900 people. Its population grows by 8% each year. What will the population be after 4 years?

Task card 22 Exponential Functions: Growth & De...

A town has 7200 people. Its population grows by 7% each year. What will the population be after 9 years?

Task card 23 Exponential Functions: Growth & De...

The population of a town is modeled by $y = 7500(0.96)^t$, where t is in years. By what percent does it decrease each year?

Task card 24 Exponential Functions: Growth & De...

A car costs $16000. Its value decreases by 14% each year. What is its value after 3 years, in dollars?

Exponential Functions: Growth & Decay Task Cards

Recording sheet · Grade 9 · Answer each question. Round money and populations to the nearest whole number. Write functions like y = 3(2)^x.

Scan to check your answers

Name: _____ Date: _____

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 Functions: Growth & Decay Task Cards: Answer Key

Grade 9 · Hard

The answers online

1. 5867	**2.** 29%	**3.** 6915
4. 8559	**5.** 2%	**6.** 8833
7. 12449	**8.** 10%	**9.** 4434
10. 3602	**11.** 28%	**12.** 28636
13. 3641	**14.** 30%	**15.** 5354
16. 8571	**17.** 23%	**18.** 6419
19. 5101	**20.** 31%	**21.** 3945
22. 13237	**23.** 4%	**24.** 10177