Task card 1 Exponential Growth, Decay & Compou...

Does $y = 120(1.04)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 2 Exponential Growth, Decay & Compou...

A colony of 12 bacteria doubles every 10 hours. How many bacteria are there after 40 hours?

Task card 3 Exponential Growth, Decay & Compou...

Does $y = 800(0.8)^t$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 4 Exponential Growth, Decay & Compou...

A colony of 3 bacteria doubles every 3 hours. How many bacteria are there after 3 hours?

Task card 5 Exponential Growth, Decay & Compou...

Does $y = 400(1.2)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 6 Exponential Growth, Decay & Compou...

A 50-mg sample of a substance has a half-life of 3 hours. How many milligrams remain after 3 hours?

Task card 7 Exponential Growth, Decay & Compou...

Does $y = 400(0.75)^t$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 8 Exponential Growth, Decay & Compou...

A 200-mg sample of a substance has a half-life of 2 hours. How many milligrams remain after 6 hours?

Task card 9 Exponential Growth, Decay & Compou...

Does $y = 400(1.25)^t$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 10 Exponential Growth, Decay & Compou...

$2,000 is invested at 3.5% interest compounded annually for 7 years. Find the balance, to the nearest cent.

Task card 11 Exponential Growth, Decay & Compou...

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

Task card 12 Exponential Growth, Decay & Compou...

A town has 24,000 people and grows by 2% per year. Find its population after 3 years, to the nearest whole number.

Task card 13 Exponential Growth, Decay & Compou...

Does $y = 400(1.3)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 14 Exponential Growth, Decay & Compou...

$2,500 is invested at 2% interest compounded annually for 3 years. Find the balance, to the nearest cent.

Task card 15 Exponential Growth, Decay & Compou...

A machine worth $15,000 loses 8% of its value each year. Find its value after 12 years, to the nearest dollar.

Task card 16 Exponential Growth, Decay & Compou...

$1,500 is invested at 5% interest compounded quarterly for 9 years. Find the balance, to the nearest cent.

Task card 17 Exponential Growth, Decay & Compou...

Does $y = 1500(0.65)^t$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 18 Exponential Growth, Decay & Compou...

$1,500 is invested at 4% interest compounded annually for 2 years. Find the balance, to the nearest cent.

Task card 19 Exponential Growth, Decay & Compou...

A 192-mg sample of a substance has a half-life of 12 hours. How many milligrams remain after 48 hours?

Task card 20 Exponential Growth, Decay & Compou...

A town has 8,000 people and grows by 3% per year. Find its population after 12 years, to the nearest whole number.

Task card 21 Exponential Growth, Decay & Compou...

Does $y = 3000(0.75)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Task card 22 Exponential Growth, Decay & Compou...

$1,000 is invested at 2.5% interest compounded annually for 5 years. Find the balance, to the nearest cent.

Task card 23 Exponential Growth, Decay & Compou...

A machine worth $50,000 loses 10% of its value each year. Find its value after 11 years, to the nearest dollar.

Task card 24 Exponential Growth, Decay & Compou...

$5,000 is invested at 3% interest compounded quarterly for 12 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest Task Cards

Recording sheet · Grade 11 · Solve each problem. Round money to the nearest cent unless told otherwise.

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 Growth, Decay & Compound Interest Task Cards: Answer Key

Grade 11 · Easy

The answers online

1. growth, 4%	**2.** 192	**3.** decay, 20%
4. 6	**5.** growth, 20%	**6.** 25
7. decay, 25%	**8.** 25	**9.** growth, 25%
10. 2544.56	**11.** 25	**12.** 25469
13. growth, 30%	**14.** 2653.02	**15.** 5515
16. 2345.92	**17.** decay, 35%	**18.** 1622.40
19. 12	**20.** 11406	**21.** decay, 25%
22. 1131.41	**23.** 15691	**24.** 7157.03