Exponential Growth, Decay & Compound Interest · 1

$5,000 is invested at 3% interest compounded semiannually for 14 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 2

$2,000 is invested at 5% interest compounded continuously for 17 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 3

A machine worth $15,000 loses 2% of its value each year. Find its value after 8 years, to the nearest dollar.

Exponential Growth, Decay & Compound Interest · 4

Does $y = 250(0.8)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Exponential Growth, Decay & Compound Interest · 5

$1,500 is invested at 3.5% interest compounded semiannually for 12 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 6

$600 is invested at 7% interest compounded continuously for 12 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 7

A machine worth $15,000 loses 3% of its value each year. Find its value after 12 years, to the nearest dollar.

Exponential Growth, Decay & Compound Interest · 8

$1,000 is invested at 4.5% interest compounded quarterly for 7 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 2

ANSWER

4679.29

Exponential Growth, Decay & Compound Interest · 1

ANSWER

7586.11

Exponential Growth, Decay & Compound Interest · 4

ANSWER

decay, 20%

Exponential Growth, Decay & Compound Interest · 3

ANSWER

12761

Exponential Growth, Decay & Compound Interest · 6

ANSWER

1389.82

Exponential Growth, Decay & Compound Interest · 5

ANSWER

2274.66

Exponential Growth, Decay & Compound Interest · 8

ANSWER

1367.85

Exponential Growth, Decay & Compound Interest · 7

ANSWER

10408

Exponential Growth, Decay & Compound Interest · 9

$1,500 is invested at 6% interest compounded monthly for 11 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 10

$5,000 is invested at 7% interest compounded continuously for 13 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 11

A town has 1,200 people and grows by 4% per year. Find its population after 7 years, to the nearest whole number.

Exponential Growth, Decay & Compound Interest · 12

Does $y = 800(0.94)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Exponential Growth, Decay & Compound Interest · 13

$500 is invested at 3% interest compounded monthly for 8 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 14

$5,000 is invested at 3% interest compounded continuously for 8 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 15

A machine worth $4,800 loses 2% of its value each year. Find its value after 4 years, to the nearest dollar.

Exponential Growth, Decay & Compound Interest · 16

$4,000 is invested at 3% interest compounded monthly for 8 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 10

ANSWER

12421.61

Exponential Growth, Decay & Compound Interest · 9

ANSWER

2897.42

Exponential Growth, Decay & Compound Interest · 12

ANSWER

decay, 6%

Exponential Growth, Decay & Compound Interest · 11

ANSWER

1579

Exponential Growth, Decay & Compound Interest · 14

ANSWER

6356.25

Exponential Growth, Decay & Compound Interest · 13

ANSWER

635.43

Exponential Growth, Decay & Compound Interest · 16

ANSWER

5083.47

Exponential Growth, Decay & Compound Interest · 15

ANSWER

4427

Exponential Growth, Decay & Compound Interest · 17

$1,000 is invested at 2.5% interest compounded semiannually for 9 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 18

$2,000 is invested at 3% interest compounded continuously for 5 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 19

A town has 24,000 people and grows by 2% per year. Find its population after 10 years, to the nearest whole number.

Exponential Growth, Decay & Compound Interest · 20

Does $y = 3000(1.02)^x$ show growth or decay, and by what percent per period? Answer like: growth, 4%

Exponential Growth, Decay & Compound Interest · 21

$500 is invested at 3% interest compounded quarterly for 6 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 22

$1,000 is invested at 3% interest compounded continuously for 6 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 23

A town has 50,000 people and grows by 2% per year. Find its population after 12 years, to the nearest whole number.

Exponential Growth, Decay & Compound Interest · 24

$4,000 is invested at 2.5% interest compounded quarterly for 8 years. Find the balance, to the nearest cent.

Exponential Growth, Decay & Compound Interest · 18

ANSWER

2323.67

Exponential Growth, Decay & Compound Interest · 17

ANSWER

1250.58

Exponential Growth, Decay & Compound Interest · 20

ANSWER

growth, 2%

Exponential Growth, Decay & Compound Interest · 19

ANSWER

29256

Exponential Growth, Decay & Compound Interest · 22

ANSWER

1197.22

Exponential Growth, Decay & Compound Interest · 21

ANSWER

598.21

Exponential Growth, Decay & Compound Interest · 24

ANSWER

4882.57

Exponential Growth, Decay & Compound Interest · 23

ANSWER

63412