Answer Key · Lesson 7.2: Compound Interest and the Number e

School Launch · Algebra II · Unit 7 · Worksheet A · for the parent

Key

1. $5,128.18

$3,800 is invested at 2% interest compounded monthly. Find the balance after 15 years.

2. $5,459.60

$4,700 is invested at 3% interest compounded monthly. Find the balance after 5 years.

3. $2,079.51

$1,100 is invested at 4% interest compounded quarterly. Find the balance after 16 years.

4. $2,059.18

1. $A = P\left(1 + \frac{r}{n}\right)^{nt}$
2. $n = 4, t = 4$

$1,500 is invested at 8% interest compounded quarterly. Find the balance after 4 years.

5. $2,973.58

1. $A = P\left(1 + \frac{r}{n}\right)^{nt}$
2. $n = 4, t = 7$

$2,100 is invested at 5% interest compounded quarterly. Find the balance after 7 years.

6. $3,076.61

1. $A = P\left(1 + \frac{r}{n}\right)^{nt}$
2. $n = 1, t = 2$

$2,900 is invested at 3% interest compounded annually. Find the balance after 2 years.

7. $758

1. $A = P\left(1 + \frac{r}{n}\right)^{nt}$
2. $n = 4, t = 2$

$700 is invested at 4% interest compounded quarterly. Find the balance after 2 years.

8. $10,859.07

1. $A = Pe^{rt}$
2. $A = 3800e^{0.07 \cdot 15}$

$3,800 is invested at 7% compounded continuously. Find the balance after 15 years.

9. $2,801.08

1. $A = Pe^{rt}$
2. $A = 1600e^{0.07 \cdot 8}$

$1,600 is invested at 7% compounded continuously. Find the balance after 8 years.

10. $4,729.29

1. $A = Pe^{rt}$
2. $A = 3400e^{0.03 \cdot 11}$

$3,400 is invested at 3% compounded continuously. Find the balance after 11 years.