1. The inflation rate of the U.S. dollar is 3 percent. This means that every year prices increase by 3 percent. If a sandwich cost $4.45 five years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $3.82 [B] $5.16 [C] $21.58 [D] $4.58

2. The inflation rate of the U.S. dollar is 3.7 percent. This means that every year prices increase by 3.7 percent. If a paperback book cost $5.25 nine years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $5.44 [B] $45.50 [C] $7.28 [D] $3.74

3. The inflation rate of the U.S. dollar is 3.8 percent. This means that every year prices increase by 3.8 percent. If a pound of vegetables cost $1.75 three years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $5.05 [B] $1.82 [C] $1.96 [D] $1.56

4. The inflation rate of the U.S. dollar is 3.5 percent. This means that every year prices increase by 3.5 percent. If a sandwich cost $4.55 six years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $26.34 [B] $4.71 [C] $3.67 [D] $5.59

5. The inflation rate of the U.S. dollar is 2.8 percent. This means that every year prices increase by 2.8 percent. If a quart of oil cost $1.15 eight years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $1.18 [B] $1.43 [C] $0.92 [D] $8.94

6. The inflation rate of the U.S. dollar is 3.3 percent. This means that every year prices increase by 3.3 percent. If a stuffed animal cost $14.05 seven years ago, what does it cost now? Use the formula $P = A(1+r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $17.64 [B] $11.11 [C] $95.10 [D] $14.51

7. The inflation rate of the U.S. dollar is 3.6 percent. This means that every year prices increase by 3.6 percent. If a CD cost $13.75 two years ago, what does it cost now? Use the formula $P = A(1 + r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $12.78 [B] $14.76 [C] $26.51 [D] $14.25

8. The inflation rate of the U.S. dollar is 3 percent. This means that every year prices increase by 3 percent. If a pound of meat cost $0.95 five years ago, what does it cost now? Use the formula $P = A(1 + r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $4.61 [B] $1.10 [C] $0.82 [D] $0.98

9. The inflation rate of the U.S. dollar is 2.9 percent. This means that every year prices increase by 2.9 percent. If a paperback book cost $4.45 four years ago, what does it cost now? Use the formula $P = A(1 + r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

   [A] $4.99 [B] $17.28 [C] $4.58 [D] $3.96

10. The inflation rate of the U.S. dollar is 3.1 percent. This means that every year prices increase by 3.1 percent. If a pound of meat cost $1.65 six years ago, what does it cost now? Use the formula $P = A(1 + r)^t$, where P is the amount an item costs today, A is the amount the item originally cost, r is the interest rate as a decimal, and t is the time in years.

    [A] $1.70 [B] $1.37 [C] $1.98 [D] $9.59

11. If $1110 is invested in an account which earns 10% interest compounded annually, what will be the balance of the account at the end of 14 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

    [A] $1114 [B] $18,186,240 [C] $4215 [D] $2664

12. If $610 is invested in an account which earns 7% interest compounded annually, what will be the balance of the account at the end of 6 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

    [A] $3916 [B] $14,724 [C] $915 [D] $866

13. If $710 is invested in an account which earns 5% interest compounded annually, what will be the balance of the account at the end of 8 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $1049 [B] $5964 [C] $994 [D] $18,197

14. If $700 is invested in an account which earns 9% interest compounded annually, what will be the balance of the account at the end of 11 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $815,432 [B] $1806 [C] $1393 [D] $703

15. If $1210 is invested in an account which earns 6% interest compounded annually, what will be the balance of the account at the end of 4 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $7930 [B] $1528 [C] $5130 [D] $1500

16. If $980 is invested in an account which earns 8% interest compounded annually, what will be the balance of the account at the end of 16 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $2234 [B] $11,901,074 [C] $983 [D] $3357

17. If $1360 is invested in an account which earns 4% interest compounded annually, what will be the balance of the account at the end of 5 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $1361 [B] $1655 [C] $7314 [D] $1632

18. If $940 is invested in an account which earns 8% interest compounded annually, what will be the balance of the account at the end of 9 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $186,458 [B] $9137 [C] $1879 [D] $1617

19. If $760 is invested in an account which earns 9% interest compounded annually, what will be the balance of the account at the end of 20 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $285,683,798 [B] $16,568 [C] $4259 [D] $2128

20. If $1380 is invested in an account which earns 5% interest compounded annually, what will be the balance of the account at the end of 15 years? Use the formula $P = A(1 + r)^t$, where P is the account balance, A is the amount originally invested, r is the interest rate as a decimal, and t is the time invested in years.

[A] $2415 [B] $2869 [C] $1382 [D] $604,294

21. A population of 490 deer return to a forest immediately after a fire. The population increases at an annual rate of 21%. Use the formula $P = A(1 + r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

22. A population of 240 deer return to a forest immediately after a fire. The population increases at an annual rate of 10%. Use the formula $P = A(1 + r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

23. A population of 230 deer return to a forest immediately after a fire. The population increases at an annual rate of 16%. Use the formula $P = A(1 + r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

24. A population of 400 deer return to a forest immediately after a fire. The population increases at an annual rate of 9%. Use the formula $P = A(1 + r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

25. A population of 390 deer return to a forest immediately after a fire. The population increases at an annual rate of 11%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

26. A population of 280 deer return to a forest immediately after a fire. The population increases at an annual rate of 18%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

27. A population of 270 deer return to a forest immediately after a fire. The population increases at an annual rate of 17%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

28. A population of 350 deer return to a forest immediately after a fire. The population increases at an annual rate of 12%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

29. A population of 420 deer return to a forest immediately after a fire. The population increases at an annual rate of 19%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

30. A population of 330 deer return to a forest immediately after a fire. The population increases at an annual rate of 13%. Use the formula $P = A(1+r)^t$, where P is the new population, A is the original population, r is the percent written as a decimal and t is the time in years to find the population 5 years after the fire.

31. A boat that costs $9300 decreases in value by 14% per year. How much will the boat be worth after 4 years?

[A] $5087.18 [B] $9244.00 [C] $6407.33 [D] $4212.82

32. A boat that costs $8150 decreases in value by 13% per year. How much will the boat be worth after 3 years?

[A] $8111.00 [B] $5366.80 [C] $2783.20 [D] $3609.61

33. A boat that costs $5400 decreases in value by 15% per year. How much will the boat be worth after 6 years?

[A] $5310.00 [B] $7090.53 [C] $3363.39 [D] $2036.61

34. A boat that costs $6600 decreases in value by 19% per year. How much will the boat be worth after 5 years?

[A] $9149.93 [B] $2301.28 [C] $6505.00 [D] $4298.72

35. A boat that costs $10,800 decreases in value by 12% per year. How much will the boat be worth after 4 years?

[A] $6194.01 [B] $10,752.00 [C] $6476.71 [D] $4323.29

36. A boat that costs $6200 decreases in value by 20% per year. How much will the boat be worth after 5 years?

[A] $6100.00 [B] $9227.58 [C] $4168.38 [D] $2031.62

37. A boat that costs $6500 decreases in value by 18% per year. How much will the boat be worth after 3 years?

[A] $3583.89 [B] $6446.00 [C] $2916.11 [D] $4179.71

38. A boat that costs $7750 decreases in value by 11% per year. How much will the boat be worth after 6 years?

[A] $6745.71 [B] $7684.00 [C] $3851.61 [D] $3898.39

39. A boat that costs $8850 decreases in value by 16% per year. How much will the boat be worth after 4 years?

[A] $8786.00 [B] $4406.16 [C] $7174.16 [D] $4443.84

40. A boat that costs \$5950 decreases in value by 17% per year. How much will the boat be worth after 6 years?

[A] \$9312.73 [B] \$5848.00 [C] \$1945.30 [D] \$4004.70

41. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 16%. There are currently 400 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 400(0.84)^x$; 167 [B] $f(x) = 400(1.16)^x$; 840

[C] $f(x) = 400(1.16)^x$; 2320 [D] $f(x) = 400(0.84)^x$; 1680

42. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 19%. There are currently 200 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 200(0.81)^x$; 70 [B] $f(x) = 200(0.81)^x$; 810

[C] $f(x) = 200(1.19)^x$; 1190 [D] $f(x) = 200(1.19)^x$; 477

43. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 20%. There are currently 470 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 470(0.8)^x$; 1880 [B] $f(x) = 470(1.2)^x$; 1170

[C] $f(x) = 470(0.8)^x$; 154 [D] $f(x) = 470(1.2)^x$; 2820

44. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 23%. There are currently 210 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 210(1.23)^x$; 591 [B] $f(x) = 210(0.77)^x$; 57

[C] $f(x) = 210(0.77)^x$; 809 [D] $f(x) = 210(1.23)^x$; 1292

45. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 21%. There are currently 480 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 480(1.21)^x$; 2904 [B] $f(x) = 480(0.79)^x$; 148

[C] $f(x) = 480(0.79)^x$; 1896 [D] $f(x) = 480(1.21)^x$; 1245

46. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 13%. There are currently 260 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 260(0.87)^x$; 130 [B] $f(x) = 260(1.13)^x$; 479

[C] $f(x) = 260(1.13)^x$; 1469 [D] $f(x) = 260(0.87)^x$; 1131

47. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 17%. There are currently 310 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 310(0.83)^x$; 122 [B] $f(x) = 310(1.17)^x$; 1814

[C] $f(x) = 310(1.17)^x$; 680 [D] $f(x) = 310(0.83)^x$; 1287

48. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 11%. There are currently 300 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 300(0.89)^x$; 1335 [B] $f(x) = 300(1.11)^x$; 506

[C] $f(x) = 300(1.11)^x$; 1665 [D] $f(x) = 300(0.89)^x$; 168

49. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 12%. There are currently 420 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 420(0.88)^x$; 222 [B] $f(x) = 420(1.12)^x$; 2352

[C] $f(x) = 420(0.88)^x$; 1848 [D] $f(x) = 420(1.12)^x$; 740

50. A certain species of animal is endangered and its numbers are decreasing at an annual rate of 14%. There are currently 330 animals in the population. Which is an exponential function representing the population and the estimated number of animals in 5 years?

[A] $f(x) = 330(1.14)^x$; 635 [B] $f(x) = 330(1.14)^x$; 1881

[C] $f(x) = 330(0.86)^x$; 155 [D] $f(x) = 330(0.86)^x$; 1419