

Chapter Test A

For use after Chapter 7

Identify the percent of change as an *increase* or a *decrease*. Then find the percent of change.

33. Original: 90
New: 54

34. Original: 20
New: 23

35. Original: 120
New: 144

36. Original: 152
New: 133

37. Each year, your school organizes a carnival to raise money for a class trip. This year, a total of 1026 people attended the carnival. Last year, a total of 950 people attended the carnival. By what percent did the attendance increase from last year to this year?

In Exercises 38–41, use the given information to find the new amount.

38. Wholesale price: \$88
Markup percent: 50%

39. Original price: \$15
Discount percent: 20%

40. Food bill: \$20
Sales tax: 5%

41. Original price: \$200
Sales tax: 6%

42. You want to order a new computer. The manufacturer is offering a discount of 12% off the original price of the computer. With the discount, you pay \$924. What is the original price of the computer?

For an account that earns simple annual interest, find the interest and the balance of the account.

43. $P = \$4500$, $r = 4\%$, $t = 15$ years

44. $P = \$250$, $r = 8\%$, $t = 6$ years

Find the unknown quantity for an account that earns simple annual interest.

45. $A = \$6240$, $P = \$4000$,
 $r = \underline{\quad ? \quad}$, $t = 7$ years

46. $A = \$579$, $P = \$300$,
 $r = 6.2\%$, $t = \underline{\quad ? \quad}$

47. You deposit \$1200 into a savings account that earns 3% interest compounded annually. Find the balance of the account after 2 years.

Answers

33. _____

34. _____

35. _____

36. _____

37. _____

38. _____

39. _____

40. _____

41. _____

42. _____

43. _____

44. _____

45. _____

46. _____

47. _____

Chapter Test A

For use after Chapter 7

Difference = % · original

Identify the percent of change as an *increase* or a *decrease*. Then find the percent of change.

33. Original: 90 *36 = N% · 90* 34. Original: 20 *3 = N% · 20*
 New: 54 *N% = 40%* New: 23 *N% = 15%*
35. Original: 120 *24 = N% · 120* 36. Original: 152 *19 = N% · 152*
 New: 144 *N% = 20%* New: 133 *N% = 12.5%*
37. Each year, your school organizes a carnival to raise money for a class trip. This year, a total of 1026 people attended the carnival. Last year, a total of 950 people attended the carnival. By what percent did the attendance increase from last year to this year? *76 = N% · 950*

In Exercises 38–41, use the given information to find the new amount.

38. Wholesale price: \$88 *N = 150% · 88*
 Markup percent: 50%
39. Original price: \$15 *N = (.80)(15)*
 Discount percent: 20%
40. Food bill: \$20 *1.05(20)* 41. Original price: \$200 *1.06(200)*
 Sales tax: 5% *21* Sales tax: 6% *212*
42. You want to order a new computer. The manufacturer is offering a discount of 12% off the original price of the computer. With the discount, you pay \$924. What is the original price of the computer?
924 = 88% · N

For an account that earns simple annual interest, find the interest and the balance of the account.

43. $P = \$4500, r = 4\%, t = 15$ years *I = PRT I = 4500(0.04)(15)*
44. $P = \$250, r = 8\%, t = 6$ years *I = (250)(0.08)(6)*

Find the unknown quantity for an account that earns simple annual interest.

45. $A = \$6240, P = \$4000,$ 46. $A = \$579, P = \$300,$
 $r = ? , t = 7$ years $r = 6.2\%, t = ?$

47. You deposit \$1200 into a savings account that earns 3% interest compounded annually. Find the balance of the account after 2 years.

Answers

33. 40%
decrease
34. 15%
increase
35. 20% increase
36. 12.5%
decrease
37. 8% increase
38. \$132
39. \$12.00
40. \$21
41. \$212
42. \$1050
43. I = 2700
total = 7200
44. I = 120
total = 370
45. 8%
46. 15 years
47. Skip

45. 2240 = 4000(R)(7)
2240 = 28000R
 $\frac{2240}{28000} = \frac{28000R}{28000}$
R = 8%

46. 279 = 300(0.062)t
 $\frac{279}{18.6} = \frac{18.6t}{18.6}$
L = 15