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Period $\qquad$

Directions: State whether each percent of change is a percent increase or a percent decrease. Then find the percent of increase or decrease. Round to the nearest whole percent.

1. Original: $\$ 100$

New: $\$ 59$
3. Original: 58 Homes

New: 152 Homes
5. Original: $\$ 53$

New: $\$ 75$
7. Original: $\$ 3.78$

New: $\quad \$ 2.50$
2. Original: 324 people

New: 549 people
4. Original: 66 Dimes New: 30 Dimes
6. Original: 15.6 liters New: 11.4 liters
8. Original: 231.2 mph New: $\quad 236.4 \mathrm{mph}$

Directions: Find the final price of each item. When there is a discount and sales tax, first compute the discount price and then compute the sales tax and final price.
9. DVD:
\$219
sales tax: 6.5\%
10. jeans:
$\$ 39.99$
discount: 15\%
sales tax: $4 \%$
11. book: $\$ 19.95$
discount: 5\%
sales tax: $5 \%$
12. tickets: $\$ 52.50$
sales tax: 7\%
13. skates: $\$ 99.99$
discount: 20\%
sales tax: $6.75 \%$
15. CD: $\$ 15.88$
sales tax: 4.5\%
14. boots: $\$ 59.00$
discount: 10\%
sales tax: $5.5 \%$
16. software: \$29.99
discount: 6\%
sales tax: $6.75 \%$

Directions: Solve the following problems. Show all work. Circle your answer.
17. The World Future Society predicts that by the year 2020, airplanes will be able to carry 1400 passengers. Today's biggest jets can carry 600 passengers. What will be the percent of increase of airplane passengers?
18. In 1995, America Online had about 3,000,000 users. Over the next decade, users are expected to increase from a few million to the tens of millions. Suppose the number of users increases by $150 \%$ by the year 2000 . How many users will there be in the year 2000?
19. Music Systems, Inc. allows a $10 \%$ discount if a purchase is paid for within 30 days. An additional $5 \%$ discount is given if the purchase is paid for within 15 days. Brent Goodson buys a sound system that originally cost $\$ 360$. If he pays the entire amount at the time of purchase, how much does he pay for his system after the successive discounts?
20. As soon as a new car is purchased and driven away from the dealership, it begins to lose its value, or depreciate. Alonso bought a 1994 Plymouth Neon for $\$ 9559$. One year later, the value of the car was $\$ 8500$. What was the percent of decrease of the value of the car?

