$\qquad$ Date: $\qquad$ Core: $\qquad$

## Math 7 Unit 7 Percent Applications Review

Find the percent of change. State whether each change is an increase or decrease. Round to the nearest tenth when necessary.

1. A $\$ 75$ coat is put on sale for $\$ 40$.
1.) $\qquad$
2. Mary earns $\$ 30,000$ per year. After a raise, she earns $\$ 31,500$
2.) $\qquad$
3. Larry read 12 books last year. This year, he read 16 books.
3.) $\qquad$
4. Last week, there were 212 customers. This week,
4.) $\qquad$ there were 245 customers
5. Original price: $\$ 225$ Markup price: $\$ 275$
5.) $\qquad$
6. Population in 1990: 855,000 : Population in 2000: 726,750
6.) $\qquad$

Find either the sale price after a discount or retail price after a markup. Round answers to the nearest cent.
7. Speakers: $\$ 18030 \%$ off
(sale price) 7.) $\qquad$
8. Camcorder: $\$ 35033 \%$ markup
(retail price) 8.)
(sale price) 9.) $\qquad$
10. Artwork: $\$ 25025 \%$ off
(sale price) 10.) $\qquad$
11. Chair: $\$ 14045 \%$ markup
(retail price) 11.) $\qquad$
12. Sports Equipment: $\$ 95.75$ 65\% markup
(retail price) 12.)

Solve the following word problems. Round to the nearest tenth or cent when necessary.
13. Nancy is getting a new sofa. The regular price is $\$ 1299$. It will be on sale for $30 \%$ off. What will the sale price of the sofa be?
13.) $\qquad$
14. The local grocery store has a $50 \%$ markup on gallons of milk. If the grocery store pays $\$ 2.99$ for each gallon, what will the retail price be?
14.)
15. Bob went out to buy a digital camera. The price was $\$ 329$. How much will Bob pay for the camera including the $7 \%$ sales tax?
15.) $\qquad$
16. Mark and his family went to the Outback Restaurant for dinner. The bill was $\$ 56.42$. How much will they pay in all including $7 \%$ tax and a $20 \%$ tip? (Tip on the amount including tax.) 16.) $\qquad$
17. Karla earns $\$ 500$ per week plus $5 \%$ of her sales in commission. Last week, Karla sold $\$ 2500$ worth of product. How much did she earn in all last week?
17.)
18. You spend a day out shopping at Southpoint and spend $\$ 14$ on a $\dagger$-shirt, $\$ 34$ on a pair of pants, and $\$ 18$ on a new hat. If the store takes $15 \%$ off to honor your coupon and then adds a $7 \%$ sales tax, what would your final purpose price be?
18.)
19. Jim works at a store where he is paid a weekly salary of $\$ 125$ plus a $5 \frac{1}{2} \%$ commission on his total sales. One week Jim's sales totaled $\$ 985$. How much did Jim earn that week? 19.)
20. A waiter was serving a large table of people one evening at Chili's Restaurant. He was asked at the beginning of the evening to make a choice. He could either get a $\$ 50$ tip or get $25 \%$ of the total bill as a tip. The bill came to $\$ 145.25$.
a.) Which option would be the best for the waiter?
b.) How much more?

20a.)
20b.)

