Name: $\qquad$ Date: $\qquad$
Percent of increase and decrease

## Homework: Percent Increase, Decrease, and Error.

Wednesday $1 / 4 / 17$ : \#s 1-8
Thursday: 1/5/17 \#s 9-14

## Find the new amount.

1. 12 dogs decreased by $25 \%$
2. 100 textbooks increased by $99 \%$
3. 140 fluid ounces increased by $45 \%$
4. 75 students decreased by $80 \%$

Identify the percent of change as an increase or a decrease. Then find the percent of change. Round to the nearest tenth of a percent, if necessary.
5. 5 cups to 8 cups
6. 150 pounds to 135 pounds
7. 14 dollars to 10 dollars
8. 28 seconds to 23 seconds
9. $\frac{1}{3}$ to $\frac{2}{3}$
10. $\frac{1}{3}$ to $\frac{1}{6}$
11. Yesterday your bus ride to school took 10 minutes. Today your bus ride took 12 minutes. What is the percent of change?
12. Yesterday 270 concert tickets were sold. Today 216 tickets were sold.
a. Find the percent of change in the number of tickets sold from yesterday to today.
b. Use the percent of change from part (a) to predict the number of tickets sold tomorrow. Round to the nearest ticket, if necessary.
c. Find the predicted percent of change in the number of tickets sold from yesterday to tomorrow. Round to the nearest tenth of a percent, if necessary.
13. This month a band has 6 musicians. This is a $50 \%$ increase from the number of musicians in the band last month. How many musicians were in the band last month?
14. The sides of a square garden are 8 feet long.
a. You enlarge the garden to create a $25 \%$ increase in the length of each side. Find the new length of the sides.
b. Find the percent of change in the perimeter of the garden. Round to the nearest tenth of a percent, if necessary.
c. Find the percent of change in the area of the garden. Round to the nearest tenth of a percent, if necessary.
$\qquad$
$\qquad$

## Homework: Friday 1/6/2017-Tax/Tip/Discount

1. Brandon buys a radio for $\$ 43.99$ in a state where the sales tax is $7 \%$. What is the total Brandon pays for the radio?

## Solution:

$\qquad$
2. Martin finds a shirt on a sale for $10 \%$ off at a department store. The original price was $\$ 20$. Martin must also pay $8.5 \%$ sales tax. How much is the shift after taxes are applied?

## Solution:

$\qquad$
3. Terry's restaurant bill comes to $\$ 29.99$ before tax. If the sales tax is $6.25 \%$ and she tips the waiter $20 \%$, what is the total cost of the meal?

## Solution:

$\qquad$
4. Luis wants to buy a skateboard that usually sells for $\$ 79.99$. All merchandise is discounted to $12 \%$. What is the total cost of the skateboard if Luis has to pay a state sales tax of $6.75 \%$ ?

## Solution:

$\qquad$
5. Sam orders four DVDs from an online music store. Each DVD costs $\$ 9.99$. He has a $20 \%$ discount code, and sales tax id $8.2 \%$. What is the total cost of his order?

Solution:

