Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Unit Test Review Sheet ☺ **PROPORTION PROBLEMS**:

1. I taught for 42 minutes. After 42 minutes, I spoke 1, 386 words. What is the unit rate (how many words did I speak per minute?)
2. This chart shows how many cards I can buy for the holidays. Is there a constant unit price? If yes, what is it?

|  |  |
| --- | --- |
| Cards | Cost |
| 12 | $13.20 |
| 24 | $26.40 |
| 30 | $33.00 |

1. I am buying my nephew a box of 120 old baseball cards for $30.. What is the unit rate of cost per card?
2. I am still trying to get better at running. I can run about 1 ¼ miles each 1/5 hour. What is the unit rate for the number of miles I can run per hour.
3. Sally buys 40 bracelets for $62. If every bracelet costs the same amount of money, **write a proportion** to show the number of pens Sally can buy for $128.65. Then solve the proportion.
4. Circle the better buy.
	1. 3 oz for $1.26 b. 7 oz for $2.80 c. 5 oz for $1.90 d. 10 oz for $4.20
5. This graph shows the cups of sugar per recipe ratio.

A. What is the unit rate (how many cups per recipe)?

B. How many recipes could you make with 16 cups?

C. Write an equation to represent the number of cups, y, per recipe, x.

**PERCENT PROBLEMS:**

1. The sneakers I want cost $72. If a 6.5% **tax** is added, how much will I have to pay for the sneakers?
2. At a supermarket, a certain item has increased from 75 cents per pound to 81 cents per pound. What is the **percent increase** in the cost of the item?
3. There were 34,000 employees during the year. During the holidays there were 56,100 employees. What was the **percent increase**?
4. The car dealership only pays $8000 for a car. They mark it up 40% to sell. What is the **selling price**?
5. I receive a 5% **commission** for any house that I sell. How much will I make if I sell a home for $240,000?
6. Bob is paid $120 each week plus 5% **commission** on whatever he sells. Last week, Bob had $2,000 in sales. How much money did he earn **all together** at the end of the week?
7. If the original price of a boat was $250 but was sold for $165, what was the **percent decrease**?
8. Bob though he weighs 150 pounds. He actually weighs 120 pounds. What was the **percent error** in his measurement?
9. A group of friends went out to dinner. The bill before the sales tax and tip was $27.50. A sales tax of 8% was added. The group then tipped 20% on the amount after the sales tax was added. What was the amount, in dollars, of the sales tax? What was the total amount the group paid including tax and tip?

**Ratio and Percent Review Sheet Answers**

1. 33 words per minute
2. Yes there is a constant unit price. It is $1.10
3. $0.25 per card
4. 6.25 miles per hour (or 6 ¼ miles per hour)
5. 83 bracelets
6. C. 5 oz for $1.90 is the better buy because it will cost $0.38 per oz.
7. A. The unit rate is ½ cup per recipe.
8. You can make 32 recipes with 16 cups.
9. Y= ½ x
10. $76.68
11. 8%
12. 65%
13. $11,200
14. $12,000
15. $220 (120 + 5% of 2,000)
16. 34%
17. 25%
18. Tax: 8% of 27.50 = $2.20

Total with tax: 27.50 + 2.20 = 29.70

Tip: 20% of 29.70 = $5.94

Total: 29.70 + 5.94 = $35.64

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