Name	Period	Date
	: Ratios, Proportions,	Percent of a Number, Sales tax, Tip and Discount

Express the following ratio in three different ways.

- 1. Seven gold rings to nine pairs of earrings
- 2. There are 6 ushers and 7 technicians helping at the Harper Middle School fall play. What is the ratio of technicians to all helpers?
- 3. The table shows how many students are playing sports. Which sports have a student ratio of 4:7?

Language	Number of Students
Football	35
Volleyball	14
Soccer	20
Cheer	18

- a) Cheer: Volleyball b) Soccer: Football c) Football: Cheer d) Volleyball: Soccer

Solve using a proportion.

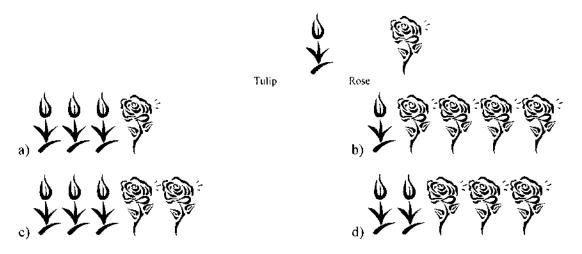
- 4. Corn sells 6 ears for \$2. If Carmen bought 24 ears of corn, how much did she spend?
- 5. Roberto spent \$7 on peaches. Peaches are priced as 8 for \$2.00. How many did he get?

Use the table. SHOW ALL WORK!

6. Beth's parents offered her the following options for an allowance. Which option gives Beth the greatest monthly allowance? Show all work!

Option 1	60% of \$80
Option 2	20% of \$300
Option 3	3% of \$800
Option 4	6% of \$200

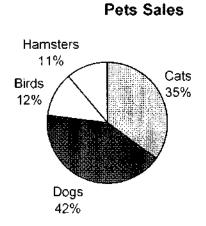
7. Nita is planting tulips and roses in a garden so 80% of the flowers will be roses. Which of the following shows 80% roses?



Use the proportion %/100 = is/of to solve the following.

- 8. 85% of 63 is what number?
- 9. 12 is what percent of 32?
- 10. 36 is 75% of what number?

11. The circle graph shows the sales of different kinds of pets at a pet store. In all, 200 pets were sold. How many dogs were sold?



12. A sweater was originally \$55. It is now marked down 35% off the original price. How much is the sweater on sale?
13. The Jackson's dinner cost \$125. They want to leave a 15% tip. How much tip should they leave?
14. If they paid \$200, how much change would they get back?
15. What will the Jackson's total bill come to? (total plus tip)
16. The Griffin's went to the grocery store and the purchases added up to 57.59. The tax is 9%. What is the total grocery bill?
17. How much was the tax?