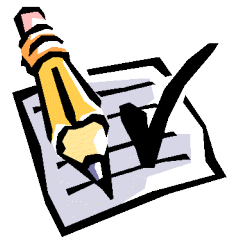


Name _____ Date _____ Hour _____



7th Grade – Unit 4 Study Guide

1. **SCHOOL** The percents of students who travel to school by car, bus, and bicycle are shown for a school of 825 students.



Car: 20%



School bus: 48%



Bicycle: 8%

- a. Write the percent as decimals.

Car

School bus

Bicycle

- b. Write the percents as fractions, in simplest form.

Car

School bus

Bicycle

- c. What percent of students use another method to travel to school?

2. Complete the missing information in the table. Make sure all fractions are in simplest form.

Fraction	Decimal	Percent
$\frac{18}{25}$	0.72	
$\frac{17}{20}$		85%
$\frac{13}{50}$		
	0.62	
		45%

3. You recently bought a TV at Best Buy, which was normally \$350. You used a coupon for 20% off. After 6% sales tax, how much did you pay for the TV (tax is applied after discounts are taken off)?

Write and solve a proportion or an equation to answer the following questions.

4. What percent of 5 is 3?

5. 25 is what percent of 20?

6. What number is 80% of 60?

7. 10% of 40.5 is what number?

8. 0.1% of what number is 4?

9. 0.5 is 25% of what number?

Find the percent of change. Round to the nearest tenth of a percent if necessary.

10. 10 inches to 25 inches

11. 57 people to 75 people

12. Yesterday, it took 40 minutes to drive to school. Today it took 32 minutes to drive to school. What is your percent of change?

13. You estimate that there are 66 cars in a parking lot. The actual number of cars is 75. Find the percent error.

For each of the following, find the indicated value.

14. **Original Price:** \$32.00
Percent Discount: x
Sale Price: \$21.00

15. **Original Price:** x
Percent Discount: 45%
Sale Price: \$15.00

16. **Original Price:** x
Percent Mark-Up: 25%
Selling Price: \$45.50

17. **Original Price:** \$150.00
Percent Mark-Up: x
Selling Price: \$270.00

18. Brianna put \$900 in a savings account. The account earns 6.5% simple interest. After 5 years and 6 months, how much money will be in Brianna's account?

19. Tom put \$1,500 in a different savings account. The account earns 4% simple interest. After 3 years, how much interest will Tom have earned?

20. You borrow \$1800 from the bank to buy a new bike. The bank has a 7.5% interest rate on your loan. After 2 years, how much a) simple interest will you have pay and b) what will be your total amount owed back to the bank?