

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

# Study Guide

1. Fill in for the fraction, percent, and/or decimal.

a.  $\frac{7}{20}$                       Decimal:                      Percent:

b. 21%                      Fraction:                      Decimal:

c. 0.76                      Percent:                      Fraction:

d.  $\frac{11}{25}$                       Decimal:                      Percent:

e. 42%                      Fraction:                      Decimal:

f. 0.08                      Percent:                      Fraction:

g.  $\frac{7}{9}$                       Decimal:                      Percent:

h. 23%                      Fraction:                      Decimal:

i. 0.38                      Percent:                      Fraction:

2. Multiply the following percents.

a. 35% x 40

c. 25% x 90

b. 80% x 150

d. 75% x 24

e. 18.5% of 225

Name\_\_\_\_\_ Date\_\_\_\_\_ Period\_\_\_\_\_

f. 450% of 30

h. 25.75% of 150

g. 6.5% of 346

3. Work backwards to solve for each missing piece

a. \_\_\_\_\_ x 6% = 3.6

b. 5 x \_\_\_\_\_% = 150

c. \_\_\_\_\_ x 40% = 84

d. 25 x \_\_\_\_\_% = 12

e. \_\_\_\_\_ x 30% = 336

f. 64 x \_\_\_\_\_% = 32

g. \_\_\_\_\_ x 12% = 6.12

h. 500 x \_\_\_\_\_% = 150

4. Complete each story problem below. Remember that our equation is:

Name\_\_\_\_\_ Date\_\_\_\_\_ Period\_\_\_\_\_

Original x percent = tip, tax, discount

You will ALWAYS be given two of those. You need to figure out which one you are solving for. This will tell you whether you will be dividing or multiplying in the problem.

- a. Bob (the fool) is buying socks in Washington. There is a 6% sales tax. Bob total comes to \$64.
  - i. What does he pay in sales taxes?
  - ii. What is his total after sales taxes?
- b. Susan is buying socks for the sock and underwear drive at Beverly Cleary. She goes to Walmart. Her total comes to \$45. She has a 15% off coupon.
  - i. How much does the coupon save her?
  - ii. What is her total after the discount?
- c. Brad is out to eat with his 5 friends. Their total comes to \$64. There is a 8% sales tax and they leave a 15% tip.
  - i. How much do they pay in taxes?
  - ii. What is their new total after taxes?
  - iii. What do they tip (use the total after taxes)?
  - iv. What's their new total after tipping?

Name\_\_\_\_\_ Date\_\_\_\_\_ Period\_\_\_\_\_

- d. Dolly went to the mall with her friends. She bought a dress that originally cost \$60. She used a coupon that saved her \$15. What percent did she save?
  
  
  
  
  
  
  
  
  
  
- e. Frank went out to eat. His total came to \$20. She left a tip of \$4. What percent tip did he leave?
  
  
  
  
  
  
  
  
  
  
- f. Damian attempted 500 free throws last year. She mad 350 of them. What percent of free throws does he make?
  
  
  
  
  
  
  
  
  
  
- g. Anne went out to eat with her friends. She left a 20% tip of \$5. What was her original total?
  
  
  
  
  
  
  
  
  
  
- h. Nelson went out shopping. His total came to \$45. He has to pay 6.5% in sales tax. What does Nelson pay in taxes?
  
  
  
  
  
  
  
  
  
  
- i. Larry went out to eat. His total came to \$20 and he left a \$3 tip. What percent tip did he leave?
  
  
  
  
  
  
  
  
  
  
- j. Caroline is out shopping. She uses a 35% off coupon that saves her \$323.75. What was her original total?