

Name _____

SYSTEM OF EQUATIONS-WORD PROBLEMS #3

Directions: Find the answers to each situation below by setting up and solving a *system of equations*.

- 1) Alex bought some *chips* and *pop* for his class party. He bought a total of 32 items. Each bag of chips cost \$0.75 and each bottle of pop cost \$2.19. He spent a total of \$39.84. How many bags of chips and how many bottles of pop did he buy?

$$c + p = 32$$
$$0.75c + 2.19p = 39.84$$

c = _____

p = _____

- 2) Madison collected a bunch of *dimes* and *quarters* for her school fundraiser. She collected a total of 122 coins and a total of \$21.50. How many dimes and how many quarters did she collect?

d = _____

q = _____

- 3) Aiden bought some *notebooks* and *book covers* for the upcoming school year. He bought a total of 13 items. Each notebook cost \$1.37, and each book cover cost \$1.08. He spent a total of \$16.36. How many notebooks and how many book covers did he buy?

n = _____

b = _____

- 4) *Elizabeth* and her *sister* earned money shoveling snow over winter break. Altogether, they shoveled for a total of 30 hours. Jenna charged her customers \$12 per sidewalk, and her sister charged \$11 per sidewalk. If they earned \$347.50 total, how many hours did each girl spend shoveling?

e = _____

s = _____

- 5) Jacob puts all of his *pennies* and *nickels* in his piggy bank. He has saved up a total of 474 coins. Altogether, there is a total of \$11.22 in his bank. How many pennies and how many nickels does he have in his piggy bank?

p = _____

n = _____

- 6) Sophia earned some extra money by baby-sitting over the summer. She charged \$6.25 per *infant*, and \$9.50 for any *child* over the age of 3. She earned a total of \$245.50 while baby-sitting for 32 children. How many infants and how many children over 3 did she babysit?

i = _____

c = _____