SYSTEM OF EQUATIONS-WORD PROBLEMS #4

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

1) Ethan bought some chips and pop for his class party. He bought a total of 29 items. Each bag of chips cost $0.79 and each bottle of pop cost $2.29. He spent a total of $36.41. How many bags of chips and how many bottles of pop did he buy?

\[ c + p = 29 \]
\[ 0.79c + 2.29p = 36.41 \]

\[ c = \] 
\[ p = \]

2) Isabella collected a bunch of dimes and quarters for her school fundraiser. She collected a total of 211 coins and a total of $37.30. How many dimes and how many quarters did she collect?

\[ d = \] 
\[ q = \]

3) Liam bought some notebooks and book covers for the upcoming school year. He bought a total of 12 items. Each notebook cost $1.33, and each book cover cost $1.10. He spent a total of $14.81. How many notebooks and how many book covers did he buy?

\[ n = \] 
\[ b = \]

4) Emily and her sister earned money shoveling snow over winter break. Altogether, they shoveled for a total of 40 hours. Jenna charged her customers $13 per sidewalk, and her sister charged $10 per sidewalk. If they earned $461.50 total, how many hours did each girl spend shoveling?

\[ e = \] 
\[ s = \]

5) Mike puts all of his pennies and nickels in his piggy bank. He has saved up a total of 1,032 coins. Altogether, there is a total of $27.52 in his bank. How many pennies and how many nickels does he have in his piggy bank?

\[ p = \] 
\[ n = \]

6) Jenna earned some extra money by baby-sitting over the summer. She charged $6.50 per infant, and $9.50 for any child over the age of 3. She earned a total of $202.50 while baby-sitting for 27 children. How many infants and how many children over 3 did she babysit during the summer?

\[ i = \] 
\[ c = \]