Notebooks and Pens

A store sells pens at \$2 and notebooks at \$5.

n = number of notebooks sold.

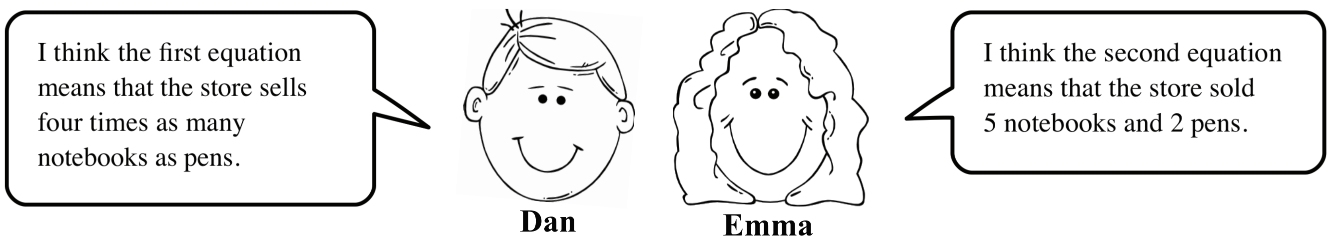
p = number of pens sold.

The following equations are true:

$4n = p$

$5n + 2p = 39$

Here is what Dan and Emma think the equations mean:



Are Dan and Emma correct?

If you think Dan is wrong, explain the mistake and explain what *you* think the equation means.

If you think Emma is wrong, explain the mistake and explain what *you* think the equation means.

Figure out for yourself the number of pens and the number of notebooks sold in the store.

Cash Registers

The drawer of a cash register contains some quarters and some dollar bills.

x = the number of quarter coins in the cash register.
y = the number of dollar bills in the cash register.

The following two equations are true:

$3x = y$
$4x + y = 70$

1. Explain in words the meaning of each equation.

2. Find two pairs of values for x and y that satisfy the first equation.

3. Find two pairs of values for x and y that satisfy the second equation.

4. Find pairs of values for x and y that satisfy both equations *simultaneously*.