Possible Solutions

Which scenario would represent an additive relationship?

- a) Bobby is twice as old as his sister Jane.
- b) For every cat in a neighborhood, there are 3 dogs.
- c) A buy one get one free sale at the mall.
- d) Jessica has four times the amount of money as Gloria.
- There is only one solution to this example. However, students need to be able to explain the difference verbally, numerically, symbolically and graphically.
- For this problem, students were asked which would represent an additive relationship.
 - a) Incorrect, because "twice as old" is a multiplicative relationship.
 - b) Incorrect, because for each cat there are 3 dogs, again multiplicative.
 - c) Correct, because for every item purchased, an additional one is added on, making this an additive relationship.
 - d) Incorrect, because "four times as much" is a multiplicative relationship.
- The solution is c).