Challenging Problems

Answer each of the following questions. Show your work and write your statements clearly.

13. Mark has three times as many marbles as Bob. Bob has twice as many marbles as Paul. If the three boys have 180 marbles altogether, how many more marbles does Mark have than Paul?

14. Gary has five times as many stickers as Linda. Linda has 15 more stickers than May. If the three students have 230 stickers altogether, how many more stickers does Gary have than May?

15. Lucy and Jean have 240 stickers altogether. If Lucy gives 10 of her stickers to Jean, she will have three times as many stickers as Jean. How many stickers does Lucy have?

16. Peter and Mike have 180 stamps altogether. After Mike gave 20 of his stamps to Peter, he had twice as many stamps as Peter. How many more stamps did Mike have than Peter at first?

17. If Amy gives 10 of her stamps to Robin, she will have four times as many stamps as Robin. If she gives 20 of her stamps to Robin, she will have three times as many stamps as Robin. How many stamps do they have in all?

18. 8 clocks and 5 watches cost \$695 altogether. 3 clocks and 3 watches cost \$300 altogether. How much more does each clock cost than each watch?